DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS

FOURTH EDITION

TEXT REVISION

DSM-IV-TR™

Published by the
American Psychiatric Association
Washington, DC

Manufactured in the United States of America on acid-free paper.

American Psychiatric Association
1400 K Street, N.W., Washington, DC 20005
www.psych.org

The correct citation for this book is American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision. Washington, DC, American Psychiatric Association, 2000.

Library of Congress Cataloging-in-Publication Data
Diagnostic and statistical manual of mental disorders : DSM-IV.—4th ed., text revision.
p. ; cm.
Prepared by the Task Force on DSM-IV and other committees and work groups of the American Psychiatric Association.
Includes index.
ISBN 0-89042-024-6 (casebound : alk. paper)—ISBN 0-89042-025-4 (pbk. : alk. paper)
1. Mental illness—Classification—Handbooks, manuals, etc. 2. Mental illness—Diagnosis—Handbooks, manuals, etc. I. Title: DSM-IV. II. American Psychiatric Association. III. American Psychiatric Association. Task Force on DSM-IV.
[DNLM: 1. Mental Disorders—classification. 2. Mental Disorders—diagnosis.
WM 15 D536 2000]
RC455.2.C4 D536 2000
616.89'075—dc21

00-024852

British Library Cataloguing in Publication Data
A CIP record is available from the British Library.

Text Design—Anne Barnes
Manufacturing—R. R. Donnelley & Sons Company

Contents

TASK FORCE ON DSM-IV

ALLEN FRANCES, M.D.
Chairperson

HAROLD ALAN PINCUS, M.D.
Vice-Chairperson

MICHAEL B. FIRST, M.D.
Editor, Text and Criteria

Nancy Coover Andreasen, M.D., Ph.D.
David H. Barlow, Ph.D.
Magda Campbell, M.D.
Dennis P. Cantwell, M.D.
Ellen Frank, Ph.D.
Judith H. Gold, M.D.
John Gunderson, M.D.
Robert E. Hales, M.D.
Kenneth S. Kendler, M.D.
David J. Kupfer, M.D.
Michael R. Liebowitz, M.D.
Juan Enrique Mezzich, M.D., Ph.D.
Peter E. Nathan, Ph.D.
Roger Peele, M.D.
Darrel A. Regier, M.D., M.P.H.
A. John Rush, M.D.
Chester W. Schmidt, M.D.
Marc Alan Schuckit, M.D.
David Shaffer, M.D.
Robert L. Spitzer, M.D.
Special Adviser
Gary J. Tucker, M.D.
B. Timothy Walsh, M.D.
Thomas A. Widiger, Ph.D.
Research Coordinator
Janet B. W. Williams, D.S.W.
John C. Urbaitis, M.D.
Assembly Liaison
James J. Hudziak, M.D.
Resident Fellow (1990–1993)
Junius Gonzales, M.D.
Resident Fellow (1988–1990)

Ruth Ross, M.A.
Science Editor
Nancy E. Vettorello, M.U.P.
Administrative Coordinator
Wendy Wakefield Davis, Ed.M.
Editorial Coordinator
Cindy D. Jones
Administrative Assistant
Nancy Sydnor-Greenberg, M.A.
Administrative Consultant
Myriam Kline, M.S.
Focused Field-Trial Coordinator
James W. Thompson, M.D., M.P.H.
Videotape Field-Trial Coordinator

The DSM-IV Text Revision Work Groups are listed on pp. xv–xvii.

Anxiety Disorders Work Group

Michael R. Liebowitz, M.D.
Chairperson
David H. Barlow, Ph.D.
Vice-Chairperson
James C. Ballenger, M.D.
Jonathan Davidson, M.D.
Edna Foa, Ph.D.
Abby Fyer, M.D.

Delirium, Dementia, and Amnestic and Other Cognitive Disorders Work Group

Gary J. Tucker, M.D.
Chairperson
Michael Popkin, M.D.
Vice-Chairperson
Eric Douglas Caine, M.D.
Marshall Folstein, M.D.
Gary Lloyd Gottlieb, M.D.
Igor Grant, M.D.
Benjamin Liptzin, M.D.

Disorders Usually First Diagnosed During Infancy, Childhood, or Adolescence Work Group

David Shaffer, M.D.
Co-Chairperson
Magda Campbell, M.D.
Co-Chairperson
Susan J. Bradley, M.D.
Dennis P. Cantwell, M.D.
Gabrielle A. Carlson, M.D.
Donald Jay Cohen, M.D.
Barry Garfinkel, M.D.
Rachel Klein, Ph.D.
Benjamin Lahey, Ph.D.
Rolf Loeber, Ph.D.
Jeffrey Newcorn, M.D.
Rhea Paul, Ph.D.
Judith H. L. Rapoport, M.D.
Sir Michael Rutter, M.D.
Fred Volkmar, M.D.
John S. Werry, M.D.

Eating Disorders Work Group

B. Timothy Walsh, M.D.
Chairperson
Paul Garfinkel, M.D.
Katherine A. Halmi, M.D.
James Mitchell, M.D.
G. Terence Wilson, Ph.D.

Mood Disorders Work Group

A. John Rush, M.D.
Chairperson
Martin B. Keller, M.D.
Vice-Chairperson
Mark S. Bauer, M.D.
David Dunner, M.D.
Ellen Frank, Ph.D.
Donald F. Klein, M.D.

Multiaxial Issues Work Group

Janet B. W. Williams, D.S.W.
Chairperson

Howard H. Goldman, M.D., Ph.D.
Vice-Chairperson

Alan M. Gruenberg, M.D.

Juan Enrique Mezzich, M.D., Ph.D.

Roger Peele, M.D.

Stephen Setterberg, M.D.

Andrew Edward Skodol II, M.D.

Personality Disorders Work Group

John Gunderson, M.D.
Chairperson

Robert M. A. Hirschfeld, M.D.
Vice-Chairperson

Roger Blashfield, Ph.D.

Susan Jean Fiester, M.D.

Theodore Millon, Ph.D.

Bruce Pfohl, M.D.

Tracie Shea, Ph.D.

Larry Siever, M.D.

Thomas A. Widiger, Ph.D.

Premenstrual Dysphoric Disorder Work Group

Judith H. Gold, M.D.
Chairperson

Jean Endicott, Ph.D.

Barbara Parry, M.D.

Sally Severino, M.D.

Nada Logan Stotland, M.D.

Ellen Frank, Ph.D.
Consultant

Psychiatric Systems Interface Disorders (Adjustment, Dissociative, Factitious, Impulse-Control, and Somatoform Disorders and Psychological Factors Affecting Medical Conditions) Work Group

Robert E. Hales, M.D.
Chairperson

C. Robert Cloninger, M.D.
Vice-Chairperson

Jonathan F. Borus, M.D.

Jack Denning Burke, Jr., M.D., M.P.H.

Joe P. Fagan, M.D.

Steven A. King, M.D.

Ronald L. Martin, M.D.

Katharine Anne Phillips, M.D.

David A. Spiegel, M.D.

Alan Stoudemire, M.D.

James J. Strain, M.D.

Michael G. Wise, M.D.

Schizophrenia and Other Psychotic Disorders Work Group

Nancy Coover Andreasen, M.D., Ph.D.
Chairperson

John M. Kane, M.D.
Vice-Chairperson

Samuel Keith, M.D.

Kenneth S. Kendler, M.D.

Thomas McGlashan, M.D.

Sexual Disorders Work Group

Chester W. Schmidt, M.D.
Chairperson
Raul Schiavi, M.D.
Leslie Schover, Ph.D.
Taylor Seagraves, M.D.
Thomas Nathan Wise, M.D.

Sleep Disorders Work Group

David J. Kupfer, M.D.
Chairperson
Charles F. Reynolds III, M.D.
Vice-Chairperson
Daniel Buysse, M.D.
Roger Peele, M.D.
Quentin Regestein, M.D.
Michael Sateia, M.D.
Michael Thorpy, M.D.

Substance-Related Disorders Work Group

Marc Alan Schuckit, M.D.
Chairperson
John E. Helzer, M.D.
Vice-Chairperson
Linda B. Cottler, Ph.D.
Thomas Crowley, M.D.
Peter E. Nathan, Ph.D.
George E. Woody, M.D.

Committee on Psychiatric Diagnosis and Assessment

Layton McCurdy, M.D.
Chairperson (1987–1994)
Kenneth Z. Altshuler, M.D. (1987–1992)
Thomas F. Anders, M.D. (1988–1994)
Susan Jane Blumenthal, M.D. (1990–1993)
Leah Joan Dickstein, M.D. (1988–1991)
Lewis J. Judd, M.D. (1988–1994)
Gerald L. Klerman, M.D. (deceased) (1988–1991)
Stuart C. Yudofsky, M.D. (1992–1994)
Jack D. Blaine, M.D.
Consultant (1987–1992)
Jerry M. Lewis, M.D.
Consultant (1988–1994)
Daniel J. Luchins, M.D.
Consultant (1987–1991)
Katharine Anne Phillips, M.D.
Consultant (1992–1994)
Cynthia Pearl Rose, M.D.
Consultant (1990–1994)
Louis Alan Moench, M.D.
Assembly Liaison (1991–1994)
Steven K. Dobscha, M.D.
Resident Fellow (1990–1992)
Mark Zimmerman, M.D.
Resident Fellow (1992–1994)

Joint Committee of the Board of Trustees and Assembly of District Branches on Issues Related to DSM-IV

Ronald A. Shellow, M.D.
Chairperson
Harvey Bluestone, M.D.
Leah Joan Dickstein, M.D.
Arthur John Farley, M.D.
Carol Ann Bernstein, M.D.

WORK GROUPS FOR THE DSM-IV TEXT REVISION

MICHAEL B. FIRST, M.D.
Co-Chairperson and Editor

HAROLD ALAN PINCUS, M.D.
Co-Chairperson

Laurie E. McQueen, M.S.S.W.
DSM Project Manager

Yoshie Satake, B.A.
DSM Program Coordinator

Anxiety Disorders Text Revision Work Group

Murray B. Stein, M.D.
Chairperson
Jonathan Abramowitz, Ph.D.
Gordon Asmundson, Ph.D.
Jean C. Beckham, Ph.D.
Timothy Brown, Ph.D., Psy.D.
Michelle Craske, Ph.D.
Edna Foa, Ph.D.
Thomas Mellman, M.D.
Ron Norton, Ph.D.
Franklin Schneier, M.D.
Richard Zinbarg, Ph.D.

Delirium, Dementia, and Amnestic and Other Cognitive Disorders and Mental Disorders Due to a General Medical Condition Text Revision Work Group

Eric Douglas Caine, M.D.
Jesse Fann, M.D., M.P.H.

Disorders Usually First Diagnosed During Infancy, Childhood, or Adolescence Text Revision Work Group

David Shaffer, M.D.
Chairperson
Donald J. Cohen, M.D.
Stephen Hinshaw, Ph.D.
Rachel G. Klein, Ph.D.
Ami Klin, Ph.D.
Daniel Pine, M.D.
Mark A. Riddle, M.D.
Fred R. Volkmar, M.D.
Charles Zeanah, M.D.

Eating Disorders Text Revision Work Group

Katharine L. Loeb, Ph.D.
B. Timothy Walsh, M.D.

Medication-Induced Movement Disorders Text Revision Work Group

Gerard Addonizio, M.D.
Lenard Adler, M.D.
Burton Angrist, M.D.
Daniel Casey, M.D.
Alan Gelenberg, M.D.
James Jefferson, M.D.
Dilip Jeste, M.D.
Peter Weiden, M.D.

Mood Disorders Text Revision Work Group

Mark S. Bauer, M.D.
Patricia Suppes, M.D., Ph.D.
Michael E. Thase, M.D.

Multiaxial Text Revision Work Group

Alan M. Gruenberg, M.D.

Personality Disorders Text Revision Work Group

Bruce Pfohl, M.D.
Thomas A. Widiger, Ph.D.

Premenstrual Dysphoric Disorder Text Revision Work Group

Sally Severino, M.D.

Psychiatric System Interface Disorders (Adjustment, Dissociative, Factitious, Impulse-Control, and Somatoform Disorders and Psychological Factors Affecting Medical Conditions) Text Revision Work Group

Mitchell Cohen, M.D.
Marc Feldman, M.D.
Eric Hollander, M.D.
Steven A. King, M.D.
James Levenson, M.D.
Ronald L. Martin, M.D. (deceased)
Jeffrey Newcorn, M.D.
Russell Noyes, Jr., M.D.
Katharine Anne Phillips. M.D.
Eyal Shemesh, M.D.
David A. Spiegel, M.D.
James J. Strain, M.D.
Sean H. Yutzy, M.D.

Schizophrenia and Other Psychotic Disorders Text Revision Work Group

Michael Flaum, M.D.
Chairperson
Xavier Amador, Ph.D.

Sexual and Gender Identity Disorders Text Revision Work Group

Chester W. Schmidt, M.D.
R. Taylor Segraves, M.D.
Thomas Nathan Wise, M.D.
Kenneth J. Zucker, Ph.D.

Sleep Disorders Text Revision Work Group

Daniel Buysse, M.D.
Peter Nowell, M.D.

Substance-Related Disorders Text Revision Work Group

Marc Alan Schuckit, M.D.

American Psychiatric Association
Committee on Psychiatric Diagnosis and Assessment

David J. Kupfer, M.D.
Chair

James Leckman, M.D.
Member

Katharine Anne Phillips, M.D.
Member

A. John Rush, M.D.
Member

Daniel Winstead, M.D.
Member

Bonnie Zima, M.D., Ph.D.
Member

Barbara Kennedy, M.D., Ph.D.
Consultant

Janet B. W. Williams, D.S.W.
Consultant

Louis Alan Moench, M.D.
Assembly Liaison

Jack Barchas, M.D.
Corresponding Member

Herbert W. Harris, M.D., Ph.D.
Corresponding Member

Charles Kaelber, M.D.
Corresponding Member

Jorge A. Costa e Silva, M.D.
Corresponding Member

T. Bedirhan Ustun, M.D.
Corresponding Member

Yeshuschandra Dhaibar, M.D.
APA/Glaxo-Wellcome Fellow

Acknowledgments for DSM-IV

DSM-IV was a team effort. More than 1,000 people (and numerous professional organizations) have helped us in the preparation of this document. Members of the Task Force on DSM-IV and DSM-IV Staff are listed on p. xi, members of the DSM-IV Work Groups are listed on pp. xii–xiv, and a list of other participants is included in Appendix J.

The major responsibility for the content of DSM-IV rests with the Task Force on DSM-IV and members of the DSM-IV Work Groups. They have worked (often much harder than they bargained for) with a dedication and good cheer that has been inspirational to us. Bob Spitzer has our special thanks for his untiring efforts and unique perspective. Norman Sartorius, Darrel Regier, Lewis Judd, Fred Goodwin, and Chuck Kaelber were instrumental in facilitating a mutually productive interchange between the American Psychiatric Association and the World Health Organization that has improved both DSM-IV and ICD-10, and increased their compatibility. We are grateful to Robert Israel, Sue Meads, and Amy Blum at the National Center for Health Statistics and Andrea Albaum-Feinstein at the American Health Information Management Association for suggestions on the DSM-IV coding system. Denis Prager, Peter Nathan, and David Kupfer helped us to develop a novel data reanalysis strategy that has been supported with funding from the John D. and Catherine T. MacArthur Foundation.

Many individuals within the American Psychiatric Association deserve recognition. Mel Sabshin's special wisdom and grace made even the most tedious tasks seem worth doing. The American Psychiatric Association Committee on Psychiatric Diagnosis and Assessment (chaired by Layton McCurdy) provided valuable direction and counsel. We would also like to thank the American Psychiatric Association Presidents (Drs. Fink, Pardes, Benedek, Hartmann, English, and McIntyre) and Assembly Speakers (Drs. Cohen, Flamm, Hanin, Pfaehler, and Shellow) who helped with the planning of our work. Carolyn Robinowitz and Jack White, and their respective staffs in the American Psychiatric Association Medical Director's Office and the Business Administration Office, have provided valuable assistance in the organization of the project.

Several other individuals have our special gratitude. Wendy Davis, Nancy Vettorello, and Nancy Sydnor-Greenberg developed and implemented an organizational structure that has kept this complex project from spinning out of control. We have also been blessed with an unusually able administrative staff, which has included Elisabeth Fitzhugh, Willa Hall, Kelly McKinney, Gloria Miele, Helen Stayna, Sarah Tilly, Nina Rosenthal, Susan Mann, Joanne Mas, and, especially, Cindy Jones. Ruth Ross, our tireless Science Editor, has been responsible for improving the clarity of expression and organization of DSM-IV. Myriam Kline (Research Coordinator for the NIH-funded DSM-IV Focused Field Trials), Jim Thompson (Research Coordinator for

the MacArthur Foundation–funded Videotape Field Trial), and Sandy Ferris (Assistant Director for the Office of Research) have made many valuable contributions. We would also like to acknowledge all the other staff persons at the American Psychiatric Association who have helped with this project. Ron McMillen, Claire Reinburg, Pam Harley, and Jane Davenport of American Psychiatric Press have provided expert production assistance.

Allen Frances, M.D.
Chairperson, Task Force on DSM-IV

Harold Alan Pincus, M.D.
Vice-Chairperson, Task Force on DSM-IV

Michael B. First, M.D.
Editor, DSM-IV Text and Criteria

Thomas A. Widiger, Ph.D.
Research Coordinator

Acknowledgments for DSM-IV Text Revision

The effort to revise the DSM-IV text was also a team effort. We are especially indebted to the tireless efforts of the DSM-IV Text Revision Work Groups (listed on pp. xv–xvii), who did the lion's share of the work in the preparation of this revision. We would also like to acknowledge the contribution of the various advisers to the Work Groups (see Appendix K, p. 929), who provided their perspective on whether the proposed changes were justified. Finally, we would like to thank the American Psychiatric Association's Committee on Psychiatric Diagnosis and Assessment (listed on p. xvii), who provided helpful guidance and oversight during the process as well as approval of the final document. Special gratitude goes to committee members Katharine A. Phillips and Janet B. W. Williams, for their meticulously careful review of the text revision. Of course, none of this could have happened without the invaluable organizational and administrative assistance provided by the DSM-IV staff, Laurie McQueen and Yoshie Satake, and production assistance provided by Anne Barnes, Pam Harley, Greg Kuny, Claire Reinburg, and Ron McMillen at American Psychiatric Press.

Michael B. First, M.D.
Co-Chairperson and Editor

Harold Alan Pincus, M.D.
Co-Chairperson

Introduction

This is the fourth edition of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*, or DSM-IV. The utility and credibility of DSM-IV require that it focus on its clinical, research, and educational purposes and be supported by an extensive empirical foundation. Our highest priority has been to provide a helpful guide to clinical practice. We hoped to make DSM-IV practical and useful for clinicians by striving for brevity of criteria sets, clarity of language, and explicit statements of the constructs embodied in the diagnostic criteria. An additional goal was to facilitate research and improve communication among clinicians and researchers. We were also mindful of the use of DSM-IV for improving the collection of clinical information and as an educational tool for teaching psychopathology.

An official nomenclature must be applicable in a wide diversity of contexts. DSM-IV is used by clinicians and researchers of many different orientations (e.g., biological, psychodynamic, cognitive, behavioral, interpersonal, family/systems). It is used by psychiatrists, other physicians, psychologists, social workers, nurses, occupational and rehabilitation therapists, counselors, and other health and mental health professionals. DSM-IV must be usable across settings—inpatient, outpatient, partial hospital, consultation-liaison, clinic, private practice, and primary care, and with community populations. It is also a necessary tool for collecting and communicating accurate public health statistics. Fortunately, all these many uses are compatible with one another.

DSM-IV was the product of 13 Work Groups (see Appendix J), each of which had primary responsibility for a section of the manual. This organization was designed to increase participation by experts in each of the respective fields. We took a number of precautions to ensure that the Work Group recommendations would reflect the breadth of available evidence and opinion and not just the views of the specific members. After extensive consultations with experts and clinicians in each field, we selected Work Group members who represented a wide range of perspectives and experiences. Work Group members were instructed that they were to participate as consensus scholars and not as advocates of previously held views. Furthermore, we established a formal evidence-based process for the Work Groups to follow.

The Work Groups reported to the Task Force on DSM-IV (see p. xi), which consisted of 27 members, many of whom also chaired a Work Group. Each of the 13 Work Groups was composed of 5 (or more) members whose reviews were critiqued by between 50 and 100 advisers, who were also chosen to represent diverse clinical and research expertise, disciplines, backgrounds, and settings. The involvement of many international experts ensured that DSM-IV had available the widest pool of information and would be applicable across cultures. Conferences and workshops were held to provide conceptual and methodological guidance for the DSM-IV effort. These

included a number of consultations between the developers of DSM-IV and the developers of ICD-10 conducted for the purpose of increasing compatibility between the two systems. Also held were methods conferences that focused on cultural factors in the diagnosis of mental disorder, on geriatric diagnosis, and on psychiatric diagnosis in primary care settings.

To maintain open and extensive lines of communication, the Task Force on DSM-IV established a liaison with many other components within the American Psychiatric Association and with more than 60 organizations and associations interested in the development of DSM-IV (e.g., American Health Information Management Association, American Nurses' Association, American Occupational Therapy Association, American Psychoanalytic Association, American Psychological Association, American Psychological Society, Coalition for the Family, Group for the Advancement of Psychiatry, National Association of Social Workers, National Center for Health Statistics, World Health Organization). We attempted to air issues and empirical evidence early in the process in order to identify potential problems and differences in interpretation. Exchanges of information were also made possible through the distribution of a semiannual newsletter (the *DSM-IV Update*), the publication of a regular column on DSM-IV in *Hospital and Community Psychiatry*, frequent presentations at national and international conferences, and numerous journal articles.

Two years before the publication of DSM-IV, the Task Force published and widely distributed the *DSM-IV Options Book*. This volume presented a comprehensive summary of the alternative proposals that were being considered for inclusion in DSM-IV in order to solicit opinion and additional data for our deliberations. We received extensive correspondence from interested individuals who shared with us additional data and recommendations on the potential impact of the possible changes in DSM-IV on their clinical practice, teaching, research, and administrative work. This breadth of discussion helped us to anticipate problems and to attempt to find the best solution among the various options. One year before the publication of DSM-IV, a near-final draft of the proposed criteria sets was distributed to allow for one last critique.

In arriving at final DSM-IV decisions, the Work Groups and the Task Force reviewed all of the extensive empirical evidence and correspondence that had been gathered. It is our belief that the major innovation of DSM-IV lies not in any of its specific content changes but rather in the systematic and explicit process by which it was constructed and documented. More than any other nomenclature of mental disorders, DSM-IV is grounded in empirical evidence.

Historical Background

The need for a classification of mental disorders has been clear throughout the history of medicine, but there has been little agreement on which disorders should be included and the optimal method for their organization. The many nomenclatures that have been developed during the past two millennia have differed in their relative emphasis on phenomenology, etiology, and course as defining features. Some systems have included only a handful of diagnostic categories; others have included thousands. Moreover, the various systems for categorizing mental disorders have differed with respect to whether their principle objective was for use in clinical, research, or statistical settings. Because the history of classification is too extensive to be summarized

fourth volume contains reports of the data reanalyses, reports of the field trials, and a final executive summary of the rationale for the decisions made by each Work Group. In addition, many papers were stimulated by the efforts toward empirical documentation in DSM-IV, and these have been published in peer-reviewed journals.

Relation to ICD-10

The tenth revision of the *International Statistical Classification of Diseases and Related Health Problems* (ICD-10), developed by WHO, was published in 1992. A clinical modification of ICD-10 (ICD-10-CM) is expected to be implemented in the United States in 2004. Those preparing ICD-10 and DSM-IV have worked closely to coordinate their efforts, resulting in much mutual influence. ICD-10 consists of an official coding system and other related clinical and research documents and instruments. The codes and terms provided in DSM-IV are fully compatible with both ICD-9-CM and ICD-10 (see Appendix H). The clinical and research drafts of ICD-10 were thoroughly reviewed by the DSM-IV Work Groups and suggested important topics for DSM-IV literature reviews and data reanalyses. Draft versions of the ICD-10 Diagnostic Criteria for Research were included as alternatives to be compared with DSM-III, DSM-III-R, and suggested DSM-IV criteria sets in the DSM-IV field trials. The many consultations between the developers of DSM-IV and ICD-10 (which were facilitated by NIMH, NIDA, and NIAAA) were enormously useful in increasing the congruence and reducing meaningless differences in wording between the two systems.

The DSM-IV Text Revision

One of the most important uses of DSM-IV has been as an educational tool. This is especially true of the descriptive text that accompanies the criteria sets for DSM-IV disorders. Given that the interval between DSM-IV and DSM-V is being extended relative to the intervals between earlier editions (from 7 years between DSM-III and DSM-III-R and between DSM-III-R and DSM-IV, to at least 12 years), the information in the text (which was prepared on the basis of literature dating up to 1992) runs the risk of becoming increasingly out-of-pace with the large volume of research published each year. In order to bridge the span between DSM-IV and DSM-V, a revision of the DSM-IV text was undertaken. The goals of this text revision were severalfold: 1) to correct any factual errors that were identified in the DSM-IV text; 2) to review the DSM-IV text to ensure that all of the information is still up-to-date; 3) to make changes to the DSM-IV text to reflect new information available since the DSM-IV literature reviews were completed in 1992; 4) to make improvements that will enhance the educational value of DSM-IV; and 5) to update those ICD-9-CM codes that were changed since the DSM-IV 1996 Coding Update. As with the original DSM-IV, all changes proposed for the text had to be supported by empirical data. Furthermore, all proposed changes were limited to the text sections (e.g., Associated Features and Disorders, Prevalence). No substantive changes in the criteria sets were considered, nor were any proposals entertained for new disorders, new subtypes, or changes in the status of the DSM-IV appendix categories.

The text revision process began in 1997 with the appointment of DSM-IV Text Revision Work Groups, corresponding to the original DSM-IV Work Group structure.

here, we focus briefly only on those aspects that have led directly to the development of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) and to the "Mental Disorders" sections in the various editions of the *International Classification of Diseases* (ICD).

In the United States, the initial impetus for developing a classification of mental disorders was the need to collect statistical information. What might be considered the first official attempt to gather information about mental illness in the United States was the recording of the frequency of one category—"idiocy/insanity" in the 1840 census. By the 1880 census, seven categories of mental illness were distinguished—mania, melancholia, monomania, paresis, dementia, dipsomania, and epilepsy. In 1917, the Committee on Statistics of the American Psychiatric Association (at that time called the American Medico-Psychological Association [the name was changed in 1921]), together with the National Commission on Mental Hygiene, formulated a plan that was adopted by the Bureau of the Census for gathering uniform statistics across mental hospitals. Although this system devoted more attention to clinical utility than did previous systems, it was still primarily a statistical classification. The American Psychiatric Association subsequently collaborated with the New York Academy of Medicine to develop a nationally acceptable psychiatric nomenclature that would be incorporated within the first edition of the American Medical Association's Standard Classified Nomenclature of Disease. This nomenclature was designed primarily for diagnosing inpatients with severe psychiatric and neurological disorders.

A much broader nomenclature was later developed by the U.S. Army (and modified by the Veterans Administration) in order to better incorporate the outpatient presentations of World War II servicemen and veterans (e.g., psychophysiological, personality, and acute disorders). Contemporaneously, the World Health Organization (WHO) published the sixth edition of ICD, which, for the first time, included a section for mental disorders. ICD-6 was heavily influenced by the Veterans Administration nomenclature and included 10 categories for psychoses, 9 for psychoneuroses, and 7 for disorders of character, behavior, and intelligence.

The American Psychiatric Association Committee on Nomenclature and Statistics developed a variant of the ICD-6 that was published in 1952 as the first edition of the *Diagnostic and Statistical Manual: Mental Disorders* (DSM-I). DSM-I contained a glossary of descriptions of the diagnostic categories and was the first official manual of mental disorders to focus on clinical utility. The use of the term *reaction* throughout DSM-I reflected the influence of Adolf Meyer's psychobiological view that mental disorders represented reactions of the personality to psychological, social, and biological factors.

In part because of the lack of widespread acceptance of the mental disorder taxonomy contained in ICD-6 and ICD-7, WHO sponsored a comprehensive review of diagnostic issues that was conducted by the British psychiatrist Stengel. His report can be credited with having inspired many of the recent advances in diagnostic methodology—most especially the need for explicit definitions as a means of promoting reliable clinical diagnoses. However, the next round of diagnostic revision, which led to DSM-II and ICD-8, did not follow Stengel's recommendations to any great degree. DSM-II was similar to DSM-I but eliminated the term *reaction*.

As had been the case for DSM-I and DSM-II, the development of DSM-III was co-

ordinated with the development of the next (ninth) version of ICD, which was published in 1975 and implemented in 1978. Work began on DSM-III in 1974, with publication in 1980. DSM-III introduced a number of important methodological innovations, including explicit diagnostic criteria, a multiaxial system, and a descriptive approach that attempted to be neutral with respect to theories of etiology. This effort was facilitated by the extensive empirical work then under way on the construction and validation of explicit diagnostic criteria and the development of semistructured interviews. ICD-9 did not include diagnostic criteria or a multiaxial system largely because the primary function of this international system was to delineate categories to facilitate the collection of basic health statistics. In contrast, DSM-III was developed with the additional goal of providing a medical nomenclature for clinicians and researchers. Because of dissatisfaction across all of medicine with the lack of specificity in ICD-9, a decision was made to modify it for use in the United States, resulting in ICD-9-CM (for Clinical Modification).

Experience with DSM-III revealed a number of inconsistencies in the system and a number of instances in which the criteria were not entirely clear. Therefore, the American Psychiatric Association appointed a Work Group to Revise DSM-III, which developed the revisions and corrections that led to the publication of DSM-III-R in 1987.

The DSM-IV Revision Process

The third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III) represented a major advance in the diagnosis of mental disorders and greatly facilitated empirical research. The development of DSM-IV has benefited from the substantial increase in the research on diagnosis that was generated in part by DSM-III and DSM-III-R. Most diagnoses now have an empirical literature or available data sets that are relevant to decisions regarding the revision of the diagnostic manual. The Task Force on DSM-IV and its Work Groups conducted a three-stage empirical process that included 1) comprehensive and systematic reviews of the published literature, 2) reanalyses of already-collected data sets, and 3) extensive issue-focused field trials.

Literature Reviews

Two methods conferences were sponsored to articulate for all the Work Groups a systematic procedure for finding, extracting, aggregating, and interpreting data in a comprehensive and objective fashion. The initial tasks of each of the DSM-IV Work Groups were to identify the most pertinent issues regarding each diagnosis and to determine the kinds of empirical data relevant to their resolution. A Work Group member or adviser was then assigned the responsibility of conducting a systematic and comprehensive review of the relevant literature that would inform the resolution of the issue and also document the text of DSM-IV. The domains considered in making decisions included clinical utility, reliability, descriptive validity, psychometric performance characteristics of individual criteria, and a number of validating variables.

Each literature review specified 1) the issues or aspects of the text and criteria under consideration and the significance of the issues with respect to DSM-IV; 2) the review method (including the sources for identifying relevant studies, the number of

studies considered, the criteria for inclusion and exclusion from the review, and the variables catalogued in each study); 3) the results of the review (including a descriptive summary of the studies with respect to methodology, design, and substantive correlates of the findings, the relevant findings, and the analyses conducted on these findings); and 4) the various options for resolving the issue, the advantages and disadvantages of each option, recommendations, and suggestions for additional research that would be needed to provide a more conclusive resolution.

The goal of the DSM-IV literature reviews was to provide comprehensive and unbiased information and to ensure that DSM-IV reflects the best available clinical and research literature. For this reason, we used systematic computer searches and critical reviews done by large groups of advisers to ensure that the literature coverage was adequate and that the interpretation of the results was justified. Input was solicited especially from those persons likely to be critical of the conclusions of the review. The literature reviews were revised many times to produce as comprehensive and balanced a result as possible. It must be noted that for some issues addressed by the DSM-IV Work Groups, particularly those that were more conceptual in nature or for which there were insufficient data, a review of the empirical literature had limited utility. Despite these limitations, the reviews were helpful in documenting the rationale and empirical support for decisions made by the DSM-IV Work Groups.

Data Reanalyses

When a review of the literature revealed a lack of evidence (or conflicting evidence) for the resolution of an issue, we often made use of two additional resources—data reanalyses and field trials—to help in making final decisions. Analyses of relevant unpublished data sets were supported by a grant to the American Psychiatric Association from the John D. and Catherine T. MacArthur Foundation. Most of the 40 data reanalyses performed for DSM-IV involved the collaboration of several investigators at different sites. These researchers jointly subjected their data to questions posed by the Work Groups concerning the criteria included in DSM-III-R or criteria that might be included in DSM-IV. Data reanalyses also made it possible for Work Groups to generate several criteria sets that were then tested in the DSM-IV field trials. Although, for the most part, the data sets used in the reanalyses had been collected as part of epidemiological studies or treatment or other clinical studies, they were also highly relevant to the nosological questions facing the DSM-IV Work Groups.

Field Trials

Twelve DSM-IV field trials were sponsored by the National Institute of Mental Health (NIMH) in collaboration with the National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA). The field trials allowed the DSM-IV Work Groups to compare alternative options and to study the possible impact of suggested changes. Field trials compared DSM-III, DSM-III-R, ICD-10, and proposed DSM-IV criteria sets in 5–10 different sites per field trial, with approximately 100 subjects at each site. Diverse sites, with representative groups of subjects from a range of sociocultural and ethnic backgrounds, were selected to ensure generalizability of field-trial results and to test some of the most difficult ques-

tions in differential diagnosis. The 12 field trials included more than 70 sites and evaluated more than 6,000 subjects. The field trials collected information on the reliability and performance characteristics of each criteria set as a whole, as well as of the specific items within each criteria set. The field trials also helped to bridge the boundary between clinical research and clinical practice by determining how well suggestions for change that are derived from clinical research findings apply in clinical practice.

Criteria for Change

Although it was impossible to develop absolute and infallible criteria for when changes should be made, there were some principles that guided our efforts. The threshold for making revisions in DSM-IV was set higher than that for DSM-III and DSM-III-R. Decisions had to be substantiated by explicit statements of rationale and by the systematic review of relevant empirical data. To increase the practicality and clinical utility of DSM-IV, the criteria sets were simplified and clarified when this could be justified by empirical data. An attempt was made to strike an optimal balance in DSM-IV with respect to historical tradition (as embodied in DSM-III and DSM-III-R), compatibility with ICD-10, evidence from reviews of the literature, analyses of unpublished data sets, results of field trials, and consensus of the field. Although the amount of evidence required to support changes was set at a high threshold, it necessarily varied across disorders because the empirical support for the decisions made in DSM-III and DSM-III-R also varied across disorders. Of course, common sense was necessary, and major changes to solve minor problems required more evidence than minor changes to solve major problems.

We received suggestions to include numerous new diagnoses in DSM-IV. The proponents argued that the new diagnoses were necessary to improve the coverage of the system by including a group of individuals that were undiagnosable in DSM-III-R or diagnosable only under the Not Otherwise Specified rubric. We decided that, in general, new diagnoses should be included in the system only after research has established that they should be included rather than being included to stimulate that research. However, diagnoses already included in ICD-10 were given somewhat more consideration than those that were being proposed fresh for DSM-IV. The increased marginal utility, clarity, and coverage provided by each newly proposed diagnosis had to be balanced against the cumulative cumbersomeness imposed on the whole system, the paucity of empirical documentation, and the possible misdiagnosis or misuse that might result. No classification of mental disorders can have a sufficient number of specific categories to encompass every conceivable clinical presentation. The Not Otherwise Specified categories are provided to cover the not infrequent presentations that are at the boundary of specific categorical definitions.

The *DSM-IV Sourcebook*

Documentation has been the essential foundation of the DSM-IV process. The *DSM-IV Sourcebook*, published in four volumes, is intended to provide a comprehensive and convenient reference record of the clinical and research support for the various decisions reached by the Work Groups and the Task Force. The first three volumes of the *Sourcebook* contain condensed versions of the 150 DSM-IV literature reviews. The

The chairs of the original DSM-IV Work Groups were consulted first regarding the composition of these Text Revision Work Groups. Each Text Revision Work Group was given primary responsibility for updating a section of the DSM-IV text. This entailed reviewing the text carefully to identify errors or omissions and then conducting a systematic, comprehensive literature review that focused on relevant material that has been published since 1992. Text Revision Work Group members then drafted proposed changes, which were accompanied by written justifications for the changes along with relevant references. During a series of conference calls, the proposed changes, justifications, and references were presented by a Text Revision Work Group member to other members of the Text Revision Work Group, who provided input regarding whether the changes were justified on the basis of the supporting documentation. Once drafts of the proposed changes were finalized by the Text Revision Work Groups, the changes were more widely disseminated to a group of section-specific advisers (consisting of the original DSM-IV Work Group members supplemented by additional consultants) for further comment and review. These advisers were also given the opportunity to suggest additional changes if they could provide sufficient convincing evidence justifying inclusion in the text. After consideration of the adviser comments, final drafts of proposed changes were produced and submitted for final review and approval by the American Psychiatric Association's Committee on Psychiatric Diagnosis and Assessment.

Most of the proposed literature-based changes were in the Associated Features and Disorders (which includes Associated Laboratory Findings); Specific Culture, Age, and Gender Features; Prevalence; Course; and Familial Pattern sections of the text. For a number of disorders, the Differential Diagnosis section also was expanded to provide more comprehensive differentials. Appendix D (see p. 829) provides an overview of the changes included in this text revision.

Definition of *Mental Disorder*

Although this volume is titled the *Diagnostic and Statistical Manual of Mental Disorders*, the term *mental disorder* unfortunately implies a distinction between "mental" disorders and "physical" disorders that is a reductionistic anachronism of mind/body dualism. A compelling literature documents that there is much "physical" in "mental" disorders and much "mental" in "physical" disorders. The problem raised by the term "mental" disorders has been much clearer than its solution, and, unfortunately, the term persists in the title of DSM-IV because we have not found an appropriate substitute.

Moreover, although this manual provides a classification of mental disorders, it must be admitted that no definition adequately specifies precise boundaries for the concept of "mental disorder." The concept of mental disorder, like many other concepts in medicine and science, lacks a consistent operational definition that covers all situations. All medical conditions are defined on various levels of abstraction—for example, structural pathology (e.g., ulcerative colitis), symptom presentation (e.g., migraine), deviance from a physiological norm (e.g., hypertension), and etiology (e.g., pneumococcal pneumonia). Mental disorders have also been defined by a variety of concepts (e.g., distress, dysfunction, dyscontrol, disadvantage, disability, inflexibility, irrationality, syndromal pattern, etiology, and statistical deviation). Each

is a useful indicator for a mental disorder, but none is equivalent to the concept, and different situations call for different definitions.

Despite these caveats, the definition of *mental disorder* that was included in DSM-III and DSM-III-R is presented here because it is as useful as any other available definition and has helped to guide decisions regarding which conditions on the boundary between normality and pathology should be included in DSM-IV. In DSM-IV, each of the mental disorders is conceptualized as a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (e.g., a painful symptom) or disability (i.e., impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom. In addition, this syndrome or pattern must not be merely an expectable and culturally sanctioned response to a particular event, for example, the death of a loved one. Whatever its original cause, it must currently be considered a manifestation of a behavioral, psychological, or biological dysfunction in the individual. Neither deviant behavior (e.g., political, religious, or sexual) nor conflicts that are primarily between the individual and society are mental disorders unless the deviance or conflict is a symptom of a dysfunction in the individual, as described above.

A common misconception is that a classification of mental disorders classifies people, when actually what are being classified are disorders that people have. For this reason, the text of DSM-IV (as did the text of DSM-III-R) avoids the use of such expressions as "a schizophrenic" or "an alcoholic" and instead uses the more accurate, but admittedly more cumbersome, "an individual with Schizophrenia" or "an individual with Alcohol Dependence."

Issues in the Use of DSM-IV

Limitations of the Categorical Approach

DSM-IV is a categorical classification that divides mental disorders into types based on criteria sets with defining features. This naming of categories is the traditional method of organizing and transmitting information in everyday life and has been the fundamental approach used in all systems of medical diagnosis. A categorical approach to classification works best when all members of a diagnostic class are homogeneous, when there are clear boundaries between classes, and when the different classes are mutually exclusive. Nonetheless, the limitations of the categorical classification system must be recognized.

In DSM-IV, there is no assumption that each category of mental disorder is a completely discrete entity with absolute boundaries dividing it from other mental disorders or from no mental disorder. There is also no assumption that all individuals described as having the same mental disorder are alike in all important ways. The clinician using DSM-IV should therefore consider that individuals sharing a diagnosis are likely to be heterogeneous even in regard to the defining features of the diagnosis and that boundary cases will be difficult to diagnose in any but a probabilistic fashion. This outlook allows greater flexibility in the use of the system, encourages more specific attention to boundary cases, and emphasizes the need to capture additional

clinical information that goes beyond diagnosis. In recognition of the heterogeneity of clinical presentations, DSM-IV often includes polythetic criteria sets, in which the individual need only present with a subset of items from a longer list (e.g., the diagnosis of Borderline Personality Disorder requires only five out of nine items).

It was suggested that the DSM-IV Classification be organized following a dimensional model rather than the categorical model used in DSM-III-R. A dimensional system classifies clinical presentations based on quantification of attributes rather than the assignment to categories and works best in describing phenomena that are distributed continuously and that do not have clear boundaries. Although dimensional systems increase reliability and communicate more clinical information (because they report clinical attributes that might be subthreshold in a categorical system), they also have serious limitations and thus far have been less useful than categorical systems in clinical practice and in stimulating research. Numerical dimensional descriptions are much less familiar and vivid than are the categorical names for mental disorders. Moreover, there is as yet no agreement on the choice of the optimal dimensions to be used for classification purposes. Nonetheless, it is possible that the increasing research on, and familiarity with, dimensional systems may eventually result in their greater acceptance both as a method of conveying clinical information and as a research tool.

Use of Clinical Judgment

DSM-IV is a classification of mental disorders that was developed for use in clinical, educational, and research settings. The diagnostic categories, criteria, and textual descriptions are meant to be employed by individuals with appropriate clinical training and experience in diagnosis. It is important that DSM-IV not be applied mechanically by untrained individuals. The specific diagnostic criteria included in DSM-IV are meant to serve as guidelines to be informed by clinical judgment and are not meant to be used in a cookbook fashion. For example, the exercise of clinical judgment may justify giving a certain diagnosis to an individual even though the clinical presentation falls just short of meeting the full criteria for the diagnosis as long as the symptoms that are present are persistent and severe. On the other hand, lack of familiarity with DSM-IV or excessively flexible and idiosyncratic application of DSM-IV criteria or conventions substantially reduces its utility as a common language for communication.

In addition to the need for clinical training and judgment, the method of data collection is also important. The valid application of the diagnostic criteria included in this manual necessitates an evaluation that directly accesses the information contained in the criteria sets (e.g., whether a syndrome has persisted for a minimum period of time). Assessments that rely solely on psychological testing not covering the criteria content (e.g., projective testing) cannot be validly used as the primary source of diagnostic information.

Use of DSM-IV in Forensic Settings

When the DSM-IV categories, criteria, and textual descriptions are employed for forensic purposes, there are significant risks that diagnostic information will be mis-

used or misunderstood. These dangers arise because of the imperfect fit between the questions of ultimate concern to the law and the information contained in a clinical diagnosis. In most situations, the clinical diagnosis of a DSM-IV mental disorder is not sufficient to establish the existence for legal purposes of a "mental disorder," "mental disability," "mental disease," or "mental defect." In determining whether an individual meets a specified legal standard (e.g., for competence, criminal responsibility, or disability), additional information is usually required beyond that contained in the DSM-IV diagnosis. This might include information about the individual's functional impairments and how these impairments affect the particular abilities in question. It is precisely because impairments, abilities, and disabilities vary widely within each diagnostic category that assignment of a particular diagnosis does not imply a specific level of impairment or disability.

Nonclinical decision makers should also be cautioned that a diagnosis does not carry any necessary implications regarding the causes of the individual's mental disorder or its associated impairments. Inclusion of a disorder in the Classification (as in medicine generally) does not require that there be knowledge about its etiology. Moreover, the fact that an individual's presentation meets the criteria for a DSM-IV diagnosis does not carry any necessary implication regarding the individual's degree of control over the behaviors that may be associated with the disorder. Even when diminished control over one's behavior is a feature of the disorder, having the diagnosis in itself does not demonstrate that a particular individual is (or was) unable to control his or her behavior at a particular time.

It must be noted that DSM-IV reflects a consensus about the classification and diagnosis of mental disorders derived at the time of its initial publication. New knowledge generated by research or clinical experience will undoubtedly lead to an increased understanding of the disorders included in DSM-IV, to the identification of new disorders, and to the removal of some disorders in future classifications. The text and criteria sets included in DSM-IV will require reconsideration in light of evolving new information.

The use of DSM-IV in forensic settings should be informed by an awareness of the risks and limitations discussed above. When used appropriately, diagnoses and diagnostic information can assist decision makers in their determinations. For example, when the presence of a mental disorder is the predicate for a subsequent legal determination (e.g., involuntary civil commitment), the use of an established system of diagnosis enhances the value and reliability of the determination. By providing a compendium based on a review of the pertinent clinical and research literature, DSM-IV may facilitate the legal decision makers' understanding of the relevant characteristics of mental disorders. The literature related to diagnoses also serves as a check on ungrounded speculation about mental disorders and about the functioning of a particular individual. Finally, diagnostic information regarding longitudinal course may improve decision making when the legal issue concerns an individual's mental functioning at a past or future point in time.

Ethnic and Cultural Considerations

Special efforts have been made in the preparation of DSM-IV to incorporate an awareness that the manual is used in culturally diverse populations in the United States and

internationally. Clinicians are called on to evaluate individuals from numerous different ethnic groups and cultural backgrounds (including many who are recent immigrants). Diagnostic assessment can be especially challenging when a clinician from one ethnic or cultural group uses the DSM-IV Classification to evaluate an individual from a different ethnic or cultural group. A clinician who is unfamiliar with the nuances of an individual's cultural frame of reference may incorrectly judge as psychopathology those normal variations in behavior, belief, or experience that are particular to the individual's culture. For example, certain religious practices or beliefs (e.g., hearing or seeing a deceased relative during bereavement) may be misdiagnosed as manifestations of a Psychotic Disorder. Applying Personality Disorder criteria across cultural settings may be especially difficult because of the wide cultural variation in concepts of self, styles of communication, and coping mechanisms.

DSM-IV includes three types of information specifically related to cultural considerations: 1) a discussion in the text of cultural variations in the clinical presentations of those disorders that have been included in the DSM-IV Classification; 2) a description of culture-bound syndromes that have not been included in the DSM-IV Classification (these are included in Appendix I); and 3) an outline for cultural formulation designed to assist the clinician in systematically evaluating and reporting the impact of the individual's cultural context (also in Appendix I).

The wide international acceptance of DSM suggests that this classification is useful in describing mental disorders as they are experienced by individuals throughout the world. Nonetheless, evidence also suggests that the symptoms and course of a number of DSM-IV disorders are influenced by cultural and ethnic factors. To facilitate its application to individuals from diverse cultural and ethnic settings, DSM-IV includes a new section in the text to cover culture-related features. This section describes the ways in which varied cultural backgrounds affect the content and form of the symptom presentation (e.g., depressive disorders characterized by a preponderance of somatic symptoms rather than sadness in certain cultures), preferred idioms for describing distress, and information on prevalence when it is available.

The second type of cultural information provided pertains to "culture-bound syndromes" that have been described in just one, or a few, of the world's societies. DSM-IV provides two ways of increasing the recognition of culture-bound syndromes: 1) some (e.g., *amok, ataque de nervios*) are included as separate examples in Not Otherwise Specified categories; and 2) an appendix of culture-bound syndromes (Appendix I) has been introduced in DSM-IV that includes the name for the condition, the cultures in which it was first described, and a brief description of the psychopathology.

The provision of a culture-specific section in the DSM-IV text, the inclusion of a glossary of culture-bound syndromes, and the provision of an outline for cultural formulation are designed to enhance the cross-cultural applicability of DSM-IV. It is hoped that these new features will increase sensitivity to variations in how mental disorders may be expressed in different cultures and will reduce the possible effect of unintended bias stemming from the clinician's own cultural background.

Use of DSM-IV in Treatment Planning

Making a DSM-IV diagnosis is only the first step in a comprehensive evaluation. To formulate an adequate treatment plan, the clinician will invariably require consider-

able additional information about the person being evaluated beyond that required to make a DSM-IV diagnosis.

Distinction Between *Mental Disorder* and *General Medical Condition*

The terms *mental disorder* and *general medical condition* are used throughout this manual. The term *mental disorder* is explained above. The term *general medical condition* is used merely as a convenient shorthand to refer to conditions and disorders that are listed outside the "Mental and Behavioural Disorders" chapter of ICD. It should be recognized that these are merely terms of convenience and should not be taken to imply that there is any fundamental distinction between mental disorders and general medical conditions, that mental disorders are unrelated to physical or biological factors or processes, or that general medical conditions are unrelated to behavioral or psychosocial factors or processes.

Organization of the Manual

The manual begins with instructions concerning the use of the manual (p. 1), followed by the DSM-IV-TR Classification (pp. 13–26), which provides a systematic listing of the official codes and categories. Next is a description of the DSM-IV Multiaxial System for assessment (pp. 27–37). This is followed by the diagnostic criteria for each of the DSM-IV disorders accompanied by descriptive text (pp. 39–743). Finally, DSM-IV includes 11 appendixes.

Cautionary Statement

The specified diagnostic criteria for each mental disorder are offered as guidelines for making diagnoses, because it has been demonstrated that the use of such criteria enhances agreement among clinicians and investigators. The proper use of these criteria requires specialized clinical training that provides both a body of knowledge and clinical skills.

These diagnostic criteria and the DSM-IV Classification of mental disorders reflect a consensus of current formulations of evolving knowledge in our field. They do not encompass, however, all the conditions for which people may be treated or that may be appropriate topics for research efforts.

The purpose of DSM-IV is to provide clear descriptions of diagnostic categories in order to enable clinicians and investigators to diagnose, communicate about, study, and treat people with various mental disorders. It is to be understood that inclusion here, for clinical and research purposes, of a diagnostic category such as Pathological Gambling or Pedophilia does not imply that the condition meets legal or other non-medical criteria for what constitutes mental disease, mental disorder, or mental disability. The clinical and scientific considerations involved in categorization of these conditions as mental disorders may not be wholly relevant to legal judgments, for example, that take into account such issues as individual responsibility, disability determination, and competency.

Use of the Manual

Coding and Reporting Procedures

Diagnostic Codes

The official coding system in use in the United States as of publication of this manual is the *International Classification of Diseases*, Ninth Revision, Clinical Modification (ICD-9-CM). Most DSM-IV disorders have a numerical ICD-9-CM code that appears several times: 1) preceding the name of the disorder in the Classification (pp. 13–26), 2) at the beginning of the text section for each disorder, and 3) accompanying the criteria set for each disorder. For some diagnoses (e.g., Mental Retardation, Substance-Induced Mood Disorder), the appropriate code depends on further specification and is listed after the text and criteria set for the disorder. The names of some disorders are followed by alternative terms enclosed in parentheses, which, in most cases, were the DSM-III-R names for the disorders.

The use of diagnostic codes is fundamental to medical record keeping. Diagnostic coding facilitates data collection and retrieval and compilation of statistical information. Codes also are often required to report diagnostic data to interested third parties, including governmental agencies, private insurers, and the World Health Organization. For example, in the United States, the use of these codes has been mandated by the Health Care Financing Administration for purposes of reimbursement under the Medicare system.

Subtypes (some of which are coded in the fifth digit) and specifiers are provided for increased specificity. *Subtypes* define mutually exclusive and jointly exhaustive phenomenological subgroupings within a diagnosis and are indicated by the instruction "specify type" in the criteria set. For example, Delusional Disorder is subtyped based on the content of the delusions, with seven subtypes provided: Erotomanic Type, Grandiose Type, Jealous Type, Persecutory Type, Somatic Type, Mixed Type, and Unspecified Type. In contrast, *specifiers* are not intended to be mutually exclusive or jointly exhaustive and are indicated by the instruction "specify" or "specify if" in the criteria set (e.g., for Social Phobia, the instruction notes "Specify if: Generalized"). Specifiers provide an opportunity to define a more homogeneous subgrouping of individuals with the disorder who share certain features (e.g., Major Depressive Disorder, With Melancholic Features). Although a fifth digit is sometimes assigned to code a subtype or specifier (e.g., 294.11 Dementia of the Alzheimer's Type, With Late Onset, With Behavioral Disturbance) or severity (296.21 Major Depressive Disorder, Single Episode, Mild), the majority of subtypes and specifiers included in DSM-IV cannot be coded within the ICD-9-CM system and are indicated only by including the subtype or specifier after the name of the disorder (e.g., Social Phobia, Generalized).

Severity and Course Specifiers

A DSM-IV diagnosis is usually applied to the individual's current presentation and is not typically used to denote previous diagnoses from which the individual has recovered. The following specifiers indicating severity and course may be listed after the diagnosis: Mild, Moderate, Severe, In Partial Remission, In Full Remission, and Prior History.

The specifiers Mild, Moderate, and Severe should be used only when the full criteria for the disorder are currently met. In deciding whether the presentation should be described as mild, moderate, or severe, the clinician should take into account the number and intensity of the signs and symptoms of the disorder and any resulting impairment in occupational or social functioning. For the majority of disorders, the following guidelines may be used:

Mild. Few, if any, symptoms in excess of those required to make the diagnosis are present, and symptoms result in no more than minor impairment in social or occupational functioning.

Moderate. Symptoms or functional impairment between "mild" and "severe" are present.

Severe. Many symptoms in excess of those required to make the diagnosis, or several symptoms that are particularly severe, are present, or the symptoms result in marked impairment in social or occupational functioning.

In Partial Remission. The full criteria for the disorder were previously met, but currently only some of the symptoms or signs of the disorder remain.

In Full Remission. There are no longer any symptoms or signs of the disorder, but it is still clinically relevant to note the disorder—for example, in an individual with previous episodes of Bipolar Disorder who has been symptom free on lithium for the past 3 years. After a period of time in full remission, the clinician may judge the individual to be recovered and, therefore, would no longer code the disorder as a current diagnosis. The differentiation of In Full Remission from recovered requires consideration of many factors, including the characteristic course of the disorder, the length of time since the last period of disturbance, the total duration of the disturbance, and the need for continued evaluation or prophylactic treatment.

Prior History. For some purposes, it may be useful to note a history of the criteria having been met for a disorder even when the individual is considered to be recovered from it. Such past diagnoses of mental disorder would be indicated by using the specifier Prior History (e.g., Separation Anxiety Disorder, Prior History, for an individual with a history of Separation Anxiety Disorder who has no current disorder or who currently meets criteria for Panic Disorder).

Specific criteria for defining Mild, Moderate, and Severe have been provided for the following: Mental Retardation, Conduct Disorder, Manic Episode, and Major Depressive Episode. Specific criteria for defining In Partial Remission and In Full Remission have been provided for the following: Manic Episode, Major Depressive Episode, and Substance Dependence.

Recurrence

Not infrequently in clinical practice, individuals after a period of time in which the full criteria for the disorder are no longer met (i.e., in partial or full remission or recovery) may develop symptoms that suggest a recurrence of their original disorder but that do not yet meet the full threshold for that disorder as specified in the criteria set. It is a matter of clinical judgment as to how best to indicate the presence of these symptoms. The following options are available:

- If the symptoms are judged to be a new episode of a recurrent condition, the disorder may be diagnosed as current (or provisional) even before the full criteria have been met (e.g., after meeting criteria for a Major Depressive Episode for only 10 days instead of the 14 days usually required).
- If the symptoms are judged to be clinically significant but it is not clear whether they constitute a recurrence of the original disorder, the appropriate Not Otherwise Specified category may be given.
- If it is judged that the symptoms are not clinically significant, no additional current or provisional diagnosis is given, but "Prior History" may be noted (see p. 2).

Principal Diagnosis/Reason for Visit

When more than one diagnosis for an individual is given in an inpatient setting, the *principal diagnosis* is the condition established after study to be chiefly responsible for occasioning the admission of the individual. When more than one diagnosis is given for an individual in an outpatient setting, the *reason for visit* is the condition that is chiefly responsible for the ambulatory care medical services received during the visit. In most cases, the principal diagnosis or the reason for visit is also the main focus of attention or treatment. It is often difficult (and somewhat arbitrary) to determine which diagnosis is the principal diagnosis or the reason for visit, especially in situations of "dual diagnosis" (a substance-related diagnosis like Amphetamine Dependence accompanied by a non-substance-related diagnosis like Schizophrenia). For example, it may be unclear which diagnosis should be considered "principal" for an individual hospitalized with both Schizophrenia and Amphetamine Intoxication, because each condition may have contributed equally to the need for admission and treatment.

Multiple diagnoses can be reported in a multiaxial fashion (see p. 35) or in a nonaxial fashion (see p. 37). When the principal diagnosis is an Axis I disorder, this is indicated by listing it first. The remaining disorders are listed in order of focus of attention and treatment. When a person has both an Axis I and an Axis II diagnosis, the principal diagnosis or the reason for visit will be assumed to be on Axis I unless the Axis II diagnosis is followed by the qualifying phrase "(Principal Diagnosis)" or "(Reason for Visit)."

Provisional Diagnosis

The specifier *provisional* can be used when there is a strong presumption that the full criteria will ultimately be met for a disorder, but not enough information is available

to make a firm diagnosis. The clinician can indicate the diagnostic uncertainty by recording "(Provisional)" following the diagnosis. For example, the individual appears to have a Major Depressive Disorder, but is unable to give an adequate history to establish that the full criteria are met. Another use of the term *provisional* is for those situations in which differential diagnosis depends exclusively on the duration of illness. For example, a diagnosis of Schizophreniform Disorder requires a duration of less than 6 months and can only be given provisionally if assigned before remission has occurred.

Use of Not Otherwise Specified Categories

Because of the diversity of clinical presentations, it is impossible for the diagnostic nomenclature to cover every possible situation. For this reason, each diagnostic class has at least one Not Otherwise Specified (NOS) category and some classes have several NOS categories. There are four situations in which an NOS diagnosis may be appropriate:

- The presentation conforms to the general guidelines for a mental disorder in the diagnostic class, but the symptomatic picture does not meet the criteria for any of the specific disorders. This would occur either when the symptoms are below the diagnostic threshold for one of the specific disorders or when there is an atypical or mixed presentation.
- The presentation conforms to a symptom pattern that has not been included in the DSM-IV Classification but that causes clinically significant distress or impairment. Research criteria for some of these symptom patterns have been included in Appendix B ("Criteria Sets and Axes Provided for Further Study"), in which case a page reference to the suggested research criteria set in Appendix B is provided.
- There is uncertainty about etiology (i.e., whether the disorder is due to a general medical condition, is substance induced, or is primary).
- There is insufficient opportunity for complete data collection (e.g., in emergency situations) or inconsistent or contradictory information, but there is enough information to place it within a particular diagnostic class (e.g., the clinician determines that the individual has psychotic symptoms but does not have enough information to diagnose a specific Psychotic Disorder).

Ways of Indicating Diagnostic Uncertainty

The following table indicates the various ways in which a clinician may indicate diagnostic uncertainty:

Term	Examples of clinical situations
V Codes (for Other Conditions That May Be a Focus of Clinical Attention)	Insufficient information to know whether or not a presenting problem is attributable to a mental disorder, e.g., Academic Problem; Adult Antisocial Behavior
799.9 Diagnosis or Condition Deferred on Axis I	Information inadequate to make any diagnostic judgment about an Axis I diagnosis or condition
799.9 Diagnosis Deferred on Axis II	Information inadequate to make any diagnostic judgment about an Axis II diagnosis
300.9 Unspecified Mental Disorder (nonpsychotic)	Enough information available to rule out a Psychotic Disorder, but further specification is not possible
298.9 Psychotic Disorder Not Otherwise Specified	Enough information available to determine the presence of a Psychotic Disorder, but further specification is not possible
[Class of disorder] Not Otherwise Specified e.g., Depressive Disorder Not Otherwise Specified	Enough information available to indicate the class of disorder that is present, but further specification is not possible, either because there is not sufficient information to make a more specific diagnosis or because the clinical features of the disorder do not meet the criteria for any of the specific categories in that class
[Specific diagnosis] (Provisional) e.g., Schizophreniform Disorder (Provisional)	Enough information available to make a "working" diagnosis, but the clinician wishes to indicate a significant degree of diagnostic uncertainty

Frequently Used Criteria

Criteria Used to Exclude Other Diagnoses and to Suggest Differential Diagnoses

Most of the criteria sets presented in this manual include exclusion criteria that are necessary to establish boundaries between disorders and to clarify differential diagnoses. The several different wordings of exclusion criteria in the criteria sets throughout DSM-IV reflect the different types of possible relationships among disorders:

- **"Criteria have never been met for . . ."** This exclusion criterion is used to define a lifetime hierarchy between disorders. For example, a diagnosis of Major Depressive Disorder can no longer be given once a Manic Episode has occurred and must be changed to a diagnosis of Bipolar I Disorder.

- **"Criteria are not met for . . ."** This exclusion criterion is used to establish a hierarchy between disorders (or subtypes) defined cross-sectionally. For example, the specifier With Melancholic Features takes precedence over With Atypical Features for describing the current Major Depressive Episode.
- **"does not occur exclusively during the course of . . ."** This exclusion criterion prevents a disorder from being diagnosed when its symptom presentation occurs only during the course of another disorder. For example, dementia is not diagnosed separately if it occurs only during delirium; Conversion Disorder is not diagnosed separately if it occurs only during Somatization Disorder; Bulimia Nervosa is not diagnosed separately if it occurs only during episodes of Anorexia Nervosa. This exclusion criterion is typically used in situations in which the symptoms of one disorder are associated features or a subset of the symptoms of the preempting disorder. The clinician should consider periods of partial remission as part of the "course of another disorder." It should be noted that the excluded diagnosis can be given at times when it occurs independently (e.g., when the excluding disorder is in full remission).
- **"not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition."** This exclusion criterion is used to indicate that a substance-induced and general medical etiology must be considered and ruled out before the disorder can be diagnosed (e.g., Major Depressive Disorder can be diagnosed only after etiologies based on substance use and a general medical condition have been ruled out).
- **"not better accounted for by . . ."** This exclusion criterion is used to indicate that the disorders mentioned in the criterion must be considered in the differential diagnosis of the presenting psychopathology and that, in boundary cases, clinical judgment will be necessary to determine which disorder provides the most appropriate diagnosis. In such cases, the "Differential Diagnosis" section of the text for the disorders should be consulted for guidance.

The general convention in DSM-IV is to allow multiple diagnoses to be assigned for those presentations that meet criteria for more than one DSM-IV disorder. There are three situations in which the above-mentioned exclusion criteria help to establish a diagnostic hierarchy (and thus prevent multiple diagnoses) or to highlight differential diagnostic considerations (and thus discourage multiple diagnoses):

- When a Mental Disorder Due to a General Medical Condition or a Substance-Induced Disorder is responsible for the symptoms, it preempts the diagnosis of the corresponding primary disorder with the same symptoms (e.g., Cocaine-Induced Mood Disorder preempts Major Depressive Disorder). In such cases, an exclusion criterion containing the phrase "not due to the direct physiological effects of . . ." is included in the criteria set for the primary disorder.
- When a more pervasive disorder (e.g., Schizophrenia) has among its defining symptoms (or associated symptoms) what are the defining symptoms of a less pervasive disorder (e.g., Dysthymic Disorder), one of the following three exclusion criteria appears in the criteria set for the less pervasive disorder, indicating that only the more pervasive disorder is diagnosed: "Criteria have never been met for . . .," "Criteria are not met for . . .," "does not occur exclusively during the course of . . ."

- When there are particularly difficult differential diagnostic boundaries, the phrase "not better accounted for by . . ." is included to indicate that clinical judgment is necessary to determine which diagnosis is most appropriate. For example, Panic Disorder With Agoraphobia includes the criterion "not better accounted for by Social Phobia" and Social Phobia includes the criterion "not better accounted for by Panic Disorder With Agoraphobia" in recognition of the fact that this is a particularly difficult boundary to draw. In some cases, both diagnoses might be appropriate.

Criteria for Substance-Induced Disorders

It is often difficult to determine whether presenting symptomatology is substance induced, that is, the direct physiological consequence of Substance Intoxication or Withdrawal, medication use, or toxin exposure. In an effort to provide some assistance in making this determination, the two criteria listed below have been added to each of the Substance-Induced Disorders. These criteria are intended to provide general guidelines, but at the same time allow for clinical judgment in determining whether or not the presenting symptoms are best accounted for by the direct physiological effects of the substance. For further discussion of this issue, see p. 209.

B. There is evidence from the history, physical examination, or laboratory findings of either (1) or (2):

   (1) the symptoms developed during, or within a month of, Substance Intoxication or Withdrawal
   (2) medication use is etiologically related to the disturbance

C. The disturbance is not better accounted for by a disorder that is not substance induced. Evidence that the symptoms are better accounted for by a disorder that is not substance induced might include the following: the symptoms precede the onset of the substance use (or medication use); the symptoms persist for a substantial period of time (e.g., about a month) after the cessation of acute withdrawal or severe intoxication, or are substantially in excess of what would be expected given the type, duration, or amount of the substance used; or there is other evidence that suggests the existence of an independent non-substance-induced disorder (e.g., a history of recurrent non-substance-related episodes).

Criteria for a Mental Disorder Due to a General Medical Condition

The criterion listed below is necessary to establish the etiological requirement for each of the Mental Disorders Due to a General Medical Condition (e.g., Mood Disorder Due to Hypothyroidism). For further discussion of this issue, see p. 181.

There is evidence from the history, physical examination, or laboratory findings that the disturbance is the direct physiological consequence of a general medical condition.

Criteria for Clinical Significance

The definition of *mental disorder* in the introduction to DSM-IV requires that there be clinically significant impairment or distress. To highlight the importance of considering this issue, the criteria sets for most disorders include a clinical significance criterion (usually worded "... causes clinically significant distress or impairment in social, occupational, or other important areas of functioning"). This criterion helps establish the threshold for the diagnosis of a disorder in those situations in which the symptomatic presentation by itself (particularly in its milder forms) is not inherently pathological and may be encountered in individuals for whom a diagnosis of "mental disorder" would be inappropriate. Assessing whether this criterion is met, especially in terms of role function, is an inherently difficult clinical judgment. Reliance on information from family members and other third parties (in addition to the individual) regarding the individual's performance is often necessary.

Types of Information in the DSM-IV Text

The text of DSM-IV systematically describes each disorder under the following headings: "Diagnostic Features"; "Subtypes and/or Specifiers"; "Recording Procedures"; "Associated Features and Disorders"; "Specific Culture, Age, and Gender Features"; "Prevalence"; "Course"; "Familial Pattern"; and "Differential Diagnosis." When no information is available for a section, that section is not included. In some instances, when many of the specific disorders in a group of disorders share common features, this information is included in the general introduction to the group.

Diagnostic Features. This section clarifies the diagnostic criteria and often provides illustrative examples.

Subtypes and/or Specifiers. This section provides definitions and brief discussions concerning applicable subtypes and/or specifiers.

Recording Procedures. This section provides guidelines for reporting the name of the disorder and for selecting and recording the appropriate ICD-9-CM diagnostic code. It also includes instructions for applying any appropriate subtypes and/or specifiers.

Associated Features and Disorders. This section is usually subdivided into three parts:

- *Associated descriptive features and mental disorders.* This section includes clinical features that are frequently associated with the disorder but that are not considered essential to making the diagnosis. In some cases, these features were considered for inclusion as possible diagnostic criteria but were insufficiently sensitive or specific to be included in the final criteria set. Also noted in this section are other mental disorders associated with the disorder being discussed. It is specified (when known) if these disorders precede, co-occur with, or are consequences of the disorder in question (e.g., Alcohol-Induced Persisting Dementia is a consequence

of chronic Alcohol Dependence). If available, information on predisposing factors and complications is also included in this section.

- *Associated laboratory findings.* This section provides information on three types of laboratory findings that may be associated with the disorder: 1) those associated laboratory findings that are considered to be "diagnostic" of the disorder—for example, polysomnographic findings in certain sleep disorders; 2) those associated laboratory findings that are not considered to be diagnostic of the disorder but that have been noted to be abnormal in groups of individuals with the disorder relative to control subjects—for example, ventricle size on computed tomography as a validator of the construct of Schizophrenia; and 3) those laboratory findings that are associated with the complications of a disorder—for example, electrolyte imbalances in individuals with Anorexia Nervosa.
- *Associated physical examination findings and general medical conditions.* This section includes information about symptoms elicited by history, or findings noted during physical examination, that may be of diagnostic significance but that are not essential to the diagnosis—for example, dental erosion in Bulimia Nervosa. Also included are those disorders that are coded outside the "Mental and Behavioural Disorders" chapter of ICD that are associated with the disorder being discussed. As is done for associated mental disorders, the type of association (i.e., precedes, co-occurs with, is a consequence of) is specified if known—for example, that cirrhosis is a consequence of Alcohol Dependence.

Specific Culture, Age, and Gender Features. This section provides guidance for the clinician concerning variations in the presentation of the disorder that may be attributable to the individual's cultural setting, developmental stage (e.g., infancy, childhood, adolescence, adulthood, late life), or gender. This section also includes information on differential prevalence rates related to culture, age, and gender (e.g., sex ratio).

Prevalence. This section provides available data on point and lifetime prevalence, incidence, and lifetime risk. These data are provided for different settings (e.g., community, primary care, outpatient mental health clinics, and inpatient psychiatric settings) when this information is known.

Course. This section describes the typical lifetime patterns of presentation and evolution of the disorder. It contains information on typical *age at onset* and *mode of onset* (e.g., abrupt or insidious) of the disorder; *episodic* versus *continuous course; single episode* versus *recurrent; duration,* characterizing the typical length of the illness and its episodes; and *progression,* describing the general trend of the disorder over time (e.g., stable, worsening, improving).

Familial Pattern. This section describes data on the frequency of the disorder among first-degree biological relatives of those with the disorder compared with the frequency in the general population. It also indicates other disorders that tend to occur more frequently in family members of those with the disorder. Information regarding the heritable nature of the disorder (e.g., data from twin studies, known genetic transmission patterns) is also included in this section.

Differential Diagnosis. This section discusses how to differentiate this disorder from other disorders that have some similar presenting characteristics.

DSM-IV Organizational Plan

The DSM-IV disorders are grouped into 16 major diagnostic classes (e.g., Substance-Related Disorders, Mood Disorders, Anxiety Disorders) and one additional section, "Other Conditions That May Be a Focus of Clinical Attention."

The first section is devoted to "Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence." This division of the Classification according to age at presentation is for convenience only and is not absolute. Although disorders in this section are usually first evident in childhood and adolescence, some individuals diagnosed with disorders located in this section (e.g., Attention-Deficit/Hyperactivity Disorder) may not present for clinical attention until adulthood. In addition, it is not uncommon for the age at onset for many disorders placed in other sections to be during childhood or adolescence (e.g., Major Depressive Disorder, Schizophrenia, Generalized Anxiety Disorder). Clinicians who work primarily with children and adolescents should therefore be familiar with the entire manual, and those who work primarily with adults should also be familiar with this section.

The next three sections—"Delirium, Dementia, and Amnestic and Other Cognitive Disorders"; "Mental Disorders Due to a General Medical Condition"; and "Substance-Related Disorders"—were grouped together in DSM-III-R under the single heading of "Organic Mental Syndromes and Disorders." The term "organic mental disorder" is no longer used in DSM-IV because it incorrectly implies that the other mental disorders in the manual do not have a biological basis. As in DSM-III-R, these sections are placed before the remaining disorders in the manual because of their priority in differential diagnosis (e.g., substance-related causes of depressed mood must be ruled out before making a diagnosis of Major Depressive Disorder). To facilitate differential diagnosis, complete lists of Mental Disorders Due to a General Medical Condition and Substance-Related Disorders appear in these sections, whereas the text and criteria for these disorders are placed in the diagnostic sections with disorders with which they share phenomenology. For example, the text and criteria for Substance-Induced Mood Disorder and Mood Disorder Due to a General Medical Condition are included in the Mood Disorders section.

The organizing principle for all the remaining sections (except for Adjustment Disorders) is to group disorders based on their shared phenomenological features in order to facilitate differential diagnosis. The "Adjustment Disorders" section is organized differently in that these disorders are grouped based on their common etiology (e.g., maladaptive reaction to a stressor). Therefore, the Adjustment Disorders include a variety of heterogeneous clinical presentations (e.g., Adjustment Disorder With Depressed Mood, Adjustment Disorder With Anxiety, Adjustment Disorder With Disturbance of Conduct).

Finally, DSM-IV includes a section for "Other Conditions That May Be a Focus of Clinical Attention."

DSM-IV includes 11 appendixes:

Appendix A: Decision Trees for Differential Diagnosis. This appendix contains six decision trees (for Mental Disorders Due to a General Medical Condition, Sub-

stance-Induced Disorders, Psychotic Disorders, Mood Disorders, Anxiety Disorders, and Somatoform Disorders). Their purpose is to aid the clinician in differential diagnosis and in understanding the hierarchical structure of the DSM-IV Classification.

Appendix B: Criteria Sets and Axes Provided for Further Study. This appendix contains a number of proposals that were suggested for possible inclusion in DSM-IV. Brief texts and research criteria sets are provided for the following: postconcussional disorder, mild neurocognitive disorder, caffeine withdrawal, postpsychotic depressive disorder of Schizophrenia, simple deteriorative disorder, premenstrual dysphoric disorder, minor depressive disorder, recurrent brief depressive disorder, mixed anxiety-depressive disorder, factitious disorder by proxy, dissociative trance disorder, binge-eating disorder, depressive personality disorder, passive-aggressive personality disorder, Neuroleptic-Induced Parkinsonism, Neuroleptic Malignant Syndrome, Neuroleptic-Induced Acute Dystonia, Neuroleptic-Induced Acute Akathisia, Neuroleptic-Induced Tardive Dyskinesia, and Medication-Induced Postural Tremor. In addition, alternative dimensional descriptors for Schizophrenia and an alternative Criterion B for Dysthymic Disorder are included. Finally, three proposed axes (Defensive Functioning Scale, Global Assessment of Relational Functioning [GARF] Scale, and Social and Occupational Functioning Assessment Scale [SOFAS]) are provided.

Appendix C: Glossary of Technical Terms. This appendix contains glossary definitions of selected terms to assist users of the manual in the application of the criteria sets.

Appendix D: Highlights of Changes in DSM-IV Text Revision. This appendix provides an overview of changes as a result of the DSM-IV text revision process.

Appendix E: Alphabetical Listing of DSM-IV-TR Diagnoses and Codes. This appendix lists the DSM-IV disorders and conditions (with their ICD-9-CM codes) in alphabetical order. It has been included to facilitate the selection of diagnostic codes.

Appendix F: Numerical Listing of DSM-IV-TR Diagnoses and Codes. This appendix lists the DSM-IV disorders and conditions (with their ICD-9-CM codes) in numerical order by code. It has been included to facilitate recording of diagnostic terms.

Appendix G: ICD-9-CM Codes for Selected General Medical Conditions and Medication-Induced Disorders. This appendix contains a list of ICD-9-CM codes for selected general medical conditions and has been provided to facilitate coding on Axis III. This appendix also provides ICD-9-CM E-codes for selected medications, prescribed at therapeutic dose levels, that cause Substance-Induced Disorders. The E-codes may optionally be coded on Axis I immediately following the related disorder (e.g., 292.39 Oral Contraceptive–Induced Mood Disorder, With Depressive Features; E932.2 oral contraceptives).

Appendix H: DSM-IV Classification (With ICD-10 Codes). As of the publication of the text revision (in the late spring of 2000), the official coding system in use in the

United States is the *International Classification of Diseases*, Ninth Revision, Clinical Modification (ICD-9-CM). Throughout much of the world, the official coding system is the *International Statistical Classification of Diseases and Related Health Problems*, Tenth Revision (ICD-10). To facilitate the use of DSM-IV internationally, this appendix contains the complete DSM-IV classification with ICD-10 diagnostic codes.

Appendix I: Outline for Cultural Formulation and Glossary of Culture-Bound Syndromes. This appendix is divided into two sections. The first provides an outline for cultural formulation designed to assist the clinician in systematically evaluating and reporting the impact of the individual's cultural context. The second is a glossary of culture-bound syndromes.

Appendix J: DSM-IV Contributors. This appendix lists the names of the advisers and field-trial participants and other individuals and organizations that contributed to the development of DSM-IV.

Appendix K: DSM-IV Text Revision Advisers. This appendix lists the names of the advisers who contributed to the DSM-IV Text Revision.

DSM-IV-TR Classification

NOS = Not Otherwise Specified.

An *x* appearing in a diagnostic code indicates that a specific code number is required.

An ellipsis (. . .) is used in the names of certain disorders to indicate that the name of a specific mental disorder or general medical condition should be inserted when recording the name (e.g., 293.0 Delirium Due to Hypothyroidism).

Numbers in parentheses are page numbers.

If criteria are currently met, one of the following severity specifiers may be noted after the diagnosis:

Mild
Moderate
Severe

If criteria are no longer met, one of the following specifiers may be noted:

In Partial Remission
In Full Remission
Prior History

Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence (39)

MENTAL RETARDATION (41)

Note: *These are coded on Axis II.*

317 Mild Mental Retardation (43)
318.0 Moderate Mental Retardation (43)
318.1 Severe Mental Retardation (43)
318.2 Profound Mental Retardation (44)
319 Mental Retardation, Severity Unspecified (44)

LEARNING DISORDERS (49)

315.00 Reading Disorder (51)
315.1 Mathematics Disorder (53)
315.2 Disorder of Written Expression (54)
315.9 Learning Disorder NOS (56)

MOTOR SKILLS DISORDER (56)

315.4 Developmental Coordination Disorder (56)

COMMUNICATION DISORDERS (58)

315.31 Expressive Language Disorder (58)
315.32 Mixed Receptive-Expressive Language Disorder (62)
315.39 Phonological Disorder (65)
307.0 Stuttering (67)
307.9 Communication Disorder NOS (69)

PERVASIVE DEVELOPMENTAL DISORDERS (69)

299.00 Autistic Disorder (70)
299.80 Rett's Disorder (76)
299.10 Childhood Disintegrative Disorder (77)
299.80 Asperger's Disorder (80)
299.80 Pervasive Developmental Disorder NOS (84)

ATTENTION-DEFICIT AND DISRUPTIVE BEHAVIOR DISORDERS (85)

314.xx Attention-Deficit/Hyperactivity Disorder (85)
.01 Combined Type
.00 Predominantly Inattentive Type
.01 Predominantly Hyperactive-Impulsive Type
314.9 Attention-Deficit/Hyperactivity Disorder NOS (93)
312.xx Conduct Disorder (93)
.81 Childhood-Onset Type
.82 Adolescent-Onset Type
.89 Unspecified Onset
313.81 Oppositional Defiant Disorder (100)
312.9 Disruptive Behavior Disorder NOS (103)

FEEDING AND EATING DISORDERS OF INFANCY OR EARLY CHILDHOOD (103)

307.52 Pica (103)
307.53 Rumination Disorder (105)
307.59 Feeding Disorder of Infancy or Early Childhood (107)

TIC DISORDERS (108)

307.23 Tourette's Disorder (111)
307.22 Chronic Motor or Vocal Tic Disorder (114)
307.21 Transient Tic Disorder (115)
Specify if: Single Episode/Recurrent
307.20 Tic Disorder NOS (116)

ELIMINATION DISORDERS (116)

—.– Encopresis (116)
787.6 With Constipation and Overflow Incontinence
307.7 Without Constipation and Overflow Incontinence
307.6 Enuresis (Not Due to a General Medical Condition) (118)
Specify type: Nocturnal Only/Diurnal Only/Nocturnal and Diurnal

OTHER DISORDERS OF INFANCY, CHILDHOOD, OR ADOLESCENCE (121)

309.21 Separation Anxiety Disorder (121)
Specify if: Early Onset
313.23 Selective Mutism (125)
313.89 Reactive Attachment Disorder of Infancy or Early Childhood (127)
Specify type: Inhibited Type/Disinhibited Type
307.3 Stereotypic Movement Disorder (131)
Specify if: With Self-Injurious Behavior
313.9 Disorder of Infancy, Childhood, or Adolescence NOS (134)

Delirium, Dementia, and Amnestic and Other Cognitive Disorders (135)

DELIRIUM (136)

293.0 Delirium Due to . . . *[Indicate the General Medical Condition]* (141)
—.– Substance Intoxication Delirium *(refer to Substance-Related Disorders for substance-specific codes)* (143)
—.– Substance Withdrawal Delirium *(refer to Substance-Related Disorders for substance-specific codes)* (143)

*ICD-9-CM code valid after October 1, 2000.

Specify type: Labile Type/Disinhibited Type/Aggressive Type/Apathetic Type/Paranoid Type/Other Type/Combined Type/Unspecified Type

293.9 Mental Disorder NOS Due to . . . *[Indicate the General Medical Condition]* (190)

Substance-Related Disorders (191)

The following specifiers apply to Substance Dependence as noted:

[a]With Physiological Dependence/Without Physiological Dependence

[b]Early Full Remission/Early Partial Remission/Sustained Full Remission/Sustained Partial Remission

[c]In a Controlled Environment

[d]On Agonist Therapy

The following specifiers apply to Substance-Induced Disorders as noted:

[I]With Onset During Intoxication/[W]With Onset During Withdrawal

ALCOHOL-RELATED DISORDERS (212)

Alcohol Use Disorders (213)

303.90 Alcohol Dependence[a,b,c] (213)

305.00 Alcohol Abuse (214)

Alcohol-Induced Disorders (214)

303.00 Alcohol Intoxication (214)

291.81 Alcohol Withdrawal (215)
Specify if: With Perceptual Disturbances

291.0 Alcohol Intoxication Delirium (143)

291.0 Alcohol Withdrawal Delirium (143)

291.2 Alcohol-Induced Persisting Dementia (168)

291.1 Alcohol-Induced Persisting Amnestic Disorder (177)

291.x Alcohol-Induced Psychotic Disorder (338)
.5 With Delusions[I,W]
.3 With Hallucinations[I,W]

291.89 Alcohol-Induced Mood Disorder[I,W] (405)

291.89 Alcohol-Induced Anxiety Disorder[I,W] (479)

291.89 Alcohol-Induced Sexual Dysfunction[I] (562)

291.89 Alcohol-Induced Sleep Disorder[I,W] (655)

291.9 Alcohol-Related Disorder NOS (223)

AMPHETAMINE (OR AMPHETAMINE-LIKE)–RELATED DISORDERS (223)

Amphetamine Use Disorders (224)

304.40 Amphetamine Dependence[a,b,c] (224)

305.70 Amphetamine Abuse (225)

Amphetamine-Induced Disorders (226)

292.89 Amphetamine Intoxication (226)
Specify if: With Perceptual Disturbances

292.0 Amphetamine Withdrawal (227)

292.81 Amphetamine Intoxication Delirium (143)

292.xx Amphetamine-Induced Psychotic Disorder (338)
.11 With Delusions[I]
.12 With Hallucinations[I]

292.84 Amphetamine-Induced Mood Disorder[I,W] (405)

292.89 Amphetamine-Induced Anxiety Disorder[I] (479)

292.89 Amphetamine-Induced Sexual Dysfunction[I] (562)

292.89 Amphetamine-Induced Sleep Disorder[I,W] (655)

292.9 Amphetamine-Related Disorder NOS (231)

CAFFEINE-RELATED DISORDERS (231)

Caffeine-Induced Disorders (232)
305.90 Caffeine Intoxication (232)
292.89 Caffeine-Induced Anxiety Disorder[I] (479)
292.89 Caffeine-Induced Sleep Disorder[I] (655)
292.9 Caffeine-Related Disorder NOS (234)

CANNABIS-RELATED DISORDERS (234)

Cannabis Use Disorders (236)
304.30 Cannabis Dependence[a,b,c] (236)
305.20 Cannabis Abuse (236)

Cannabis-Induced Disorders (237)
292.89 Cannabis Intoxication (237)
Specify if: With Perceptual Disturbances
292.81 Cannabis Intoxication Delirium (143)
292.xx Cannabis-Induced Psychotic Disorder (338)
.11 With Delusions[I]
.12 With Hallucinations[I]
292.89 Cannabis-Induced Anxiety Disorder[I] (479)
292.9 Cannabis-Related Disorder NOS (241)

COCAINE-RELATED DISORDERS (241)

Cocaine Use Disorders (242)
304.20 Cocaine Dependence[a,b,c] (242)
305.60 Cocaine Abuse (243)

Cocaine-Induced Disorders (244)
292.89 Cocaine Intoxication (244)
Specify if: With Perceptual Disturbances
292.0 Cocaine Withdrawal (245)
292.81 Cocaine Intoxication Delirium (143)
292.xx Cocaine-Induced Psychotic Disorder (338)
.11 With Delusions[I]
.12 With Hallucinations[I]
292.84 Cocaine-Induced Mood Disorder[I,W] (405)
292.89 Cocaine-Induced Anxiety Disorder[I,W] (479)
292.89 Cocaine-Induced Sexual Dysfunction[I] (562)
292.89 Cocaine-Induced Sleep Disorder[I,W] (655)
292.9 Cocaine-Related Disorder NOS (250)

HALLUCINOGEN-RELATED DISORDERS (250)

Hallucinogen Use Disorders (251)
304.50 Hallucinogen Dependence[b,c] (251)
305.30 Hallucinogen Abuse (252)

Hallucinogen-Induced Disorders (252)
292.89 Hallucinogen Intoxication (252)
292.89 Hallucinogen Persisting Perception Disorder (Flashbacks) (253)
292.81 Hallucinogen Intoxication Delirium (143)
292.xx Hallucinogen-Induced Psychotic Disorder (338)
.11 With Delusions[I]
.12 With Hallucinations[I]
292.84 Hallucinogen-Induced Mood Disorder[I] (405)
292.89 Hallucinogen-Induced Anxiety Disorder[I] (479)
292.9 Hallucinogen-Related Disorder NOS (256)

INHALANT-RELATED DISORDERS (257)

Inhalant Use Disorders (258)
304.60 Inhalant Dependence[b,c] (258)
305.90 Inhalant Abuse (259)

Inhalant-Induced Disorders (259)
292.89 Inhalant Intoxication (259)
292.81 Inhalant Intoxication Delirium (143)

292.82 Inhalant-Induced Persisting Dementia (168)
292.xx Inhalant-Induced Psychotic Disorder (338)
.11 With Delusions[I]
.12 With Hallucinations[I]
292.84 Inhalant-Induced Mood Disorder[I] (405)
292.89 Inhalant-Induced Anxiety Disorder[I] (479)
292.9 Inhalant-Related Disorder NOS (263)

NICOTINE-RELATED DISORDERS (264)

Nicotine Use Disorder (264)
305.1 Nicotine Dependence[a,b] (264)

Nicotine-Induced Disorder (265)
292.0 Nicotine Withdrawal (265)
292.9 Nicotine-Related Disorder NOS (269)

OPIOID-RELATED DISORDERS (269)

Opioid Use Disorders (270)
304.00 Opioid Dependence[a,b,c,d] (270)
305.50 Opioid Abuse (271)

Opioid-Induced Disorders (271)
292.89 Opioid Intoxication (271)
Specify if: With Perceptual Disturbances
292.0 Opioid Withdrawal (272)
292.81 Opioid Intoxication Delirium (143)
292.xx Opioid-Induced Psychotic Disorder (338)
.11 With Delusions[I]
.12 With Hallucinations[I]
292.84 Opioid-Induced Mood Disorder[I] (405)
292.89 Opioid-Induced Sexual Dysfunction[I] (562)
292.89 Opioid-Induced Sleep Disorder[I,W] (655)
292.9 Opioid-Related Disorder NOS (277)

PHENCYCLIDINE (OR PHENCYCLIDINE-LIKE)–RELATED DISORDERS (278)

Phencyclidine Use Disorders (279)
304.60 Phencyclidine Dependence[b,c] (279)
305.90 Phencyclidine Abuse (279)

Phencyclidine-Induced Disorders (280)
292.89 Phencyclidine Intoxication (280)
Specify if: With Perceptual Disturbances
292.81 Phencyclidine Intoxication Delirium (143)
292.xx Phencyclidine-Induced Psychotic Disorder (338)
.11 With Delusions[I]
.12 With Hallucinations[I]
292.84 Phencyclidine-Induced Mood Disorder[I] (405)
292.89 Phencyclidine-Induced Anxiety Disorder[I] (479)
292.9 Phencyclidine-Related Disorder NOS (283)

SEDATIVE-, HYPNOTIC-, OR ANXIOLYTIC-RELATED DISORDERS (284)

Sedative, Hypnotic, or Anxiolytic Use Disorders (285)
304.10 Sedative, Hypnotic, or Anxiolytic Dependence[a,b,c] (285)
305.40 Sedative, Hypnotic, or Anxiolytic Abuse (286)

Sedative-, Hypnotic-, or Anxiolytic-Induced Disorders (286)
292.89 Sedative, Hypnotic, or Anxiolytic Intoxication (286)
292.0 Sedative, Hypnotic, or Anxiolytic Withdrawal (287)
Specify if: With Perceptual Disturbances
292.81 Sedative, Hypnotic, or Anxiolytic Intoxication Delirium (143)
292.81 Sedative, Hypnotic, or Anxiolytic Withdrawal Delirium (143)

292.82 Sedative-, Hypnotic-, or Anxiolytic-Induced Persisting Dementia (168)
292.83 Sedative-, Hypnotic-, or Anxiolytic-Induced Persisting Amnestic Disorder (177)
292.xx Sedative-, Hypnotic-, or Anxiolytic-Induced Psychotic Disorder (338)
.11 With Delusions[I,W]
.12 With Hallucinations[I,W]
292.84 Sedative-, Hypnotic-, or Anxiolytic-Induced Mood Disorder[I,W] (405)
292.89 Sedative-, Hypnotic-, or Anxiolytic-Induced Anxiety Disorder[W] (479)
292.89 Sedative-, Hypnotic-, or Anxiolytic-Induced Sexual Dysfunction[I] (562)
292.89 Sedative-, Hypnotic-, or Anxiolytic-Induced Sleep Disorder[I,W] (655)
292.9 Sedative-, Hypnotic-, or Anxiolytic-Related Disorder NOS (293)

POLYSUBSTANCE-RELATED DISORDER (293)

304.80 Polysubstance Dependence[a,b,c,d] (293)

OTHER (OR UNKNOWN) SUBSTANCE–RELATED DISORDERS (294)

Other (or Unknown) Substance Use Disorders (295)

304.90 Other (or Unknown) Substance Dependence[a,b,c,d] (192)
305.90 Other (or Unknown) Substance Abuse (198)

Other (or Unknown) Substance–Induced Disorders (295)

292.89 Other (or Unknown) Substance Intoxication (199)
Specify if: With Perceptual Disturbances
292.0 Other (or Unknown) Substance Withdrawal (201)
Specify if: With Perceptual Disturbances
292.81 Other (or Unknown) Substance–Induced Delirium (143)
292.82 Other (or Unknown) Substance–Induced Persisting Dementia (168)
292.83 Other (or Unknown) Substance–Induced Persisting Amnestic Disorder (177)
292.xx Other (or Unknown) Substance–Induced Psychotic Disorder (338)
.11 With Delusions[I,W]
.12 With Hallucinations[I,W]
292.84 Other (or Unknown) Substance–Induced Mood Disorder[I,W] (405)
292.89 Other (or Unknown) Substance–Induced Anxiety Disorder[I,W] (479)
292.89 Other (or Unknown) Substance–Induced Sexual Dysfunction[I] (562)
292.89 Other (or Unknown) Substance–Induced Sleep Disorder[I,W] (655)
292.9 Other (or Unknown) Substance–Related Disorder NOS (295)

Schizophrenia and Other Psychotic Disorders (297)

295.xx Schizophrenia (298)
The following Classification of Longitudinal Course applies to all subtypes of Schizophrenia:

Episodic With Interepisode Residual Symptoms (*specify if:* With Prominent Negative Symptoms)/Episodic With No Interepisode Residual Symptoms

Continuous (*specify if:* With Prominent Negative Symptoms)
Single Episode In Partial Remission (*specify if:* With Prominent Negative Symptoms)/ Single Episode In Full Remission
Other or Unspecified Pattern

.30 Paranoid Type (313)
.10 Disorganized Type (314)
.20 Catatonic Type (315)
.90 Undifferentiated Type (316)
.60 Residual Type (316)

295.40 Schizophreniform Disorder (317)
Specify if: Without Good Prognostic Features/With Good Prognostic Features

295.70 Schizoaffective Disorder (319)
Specify type: Bipolar Type/Depressive Type

297.1 Delusional Disorder (323)
Specify type: Erotomanic Type/ Grandiose Type/Jealous Type/ Persecutory Type/Somatic Type/ Mixed Type/Unspecified Type

298.8 Brief Psychotic Disorder (329)
Specify if: With Marked Stressor(s)/ Without Marked Stressor(s)/With Postpartum Onset

297.3 Shared Psychotic Disorder (332)

293.xx Psychotic Disorder Due to . . . *[Indicate the General Medical Condition]* (334)
.81 With Delusions
.82 With Hallucinations

—.— Substance-Induced Psychotic Disorder *(refer to Substance-Related Disorders for substance-specific codes)* (338)
Specify if: With Onset During Intoxication/With Onset During Withdrawal

298.9 Psychotic Disorder NOS (343)

Mood Disorders (345)

Code current state of Major Depressive Disorder or Bipolar I Disorder in fifth digit

1 = Mild
2 = Moderate
3 = Severe Without Psychotic Features
4 = Severe With Psychotic Features
Specify: Mood-Congruent Psychotic Features/Mood-Incongruent Psychotic Features
5 = In Partial Remission
6 = In Full Remission
0 = Unspecified

The following specifiers apply (for current or most recent episode) to Mood Disorders as noted:

[a]Severity/Psychotic/Remission Specifiers/ [b]Chronic/[c]With Catatonic Features/[d]With Melancholic Features/[e]With Atypical Features/[f]With Postpartum Onset

The following specifiers apply to Mood Disorders as noted:

[g]With or Without Full Interepisode Recovery/ [h]With Seasonal Pattern/[i]With Rapid Cycling

DEPRESSIVE DISORDERS (369)

296.xx Major Depressive Disorder (369)
.2x Single Episode[a,b,c,d,e,f]
.3x Recurrent[a,b,c,d,e,f,g,h]

300.4 Dysthymic Disorder (376)
Specify if: Early Onset/Late Onset
Specify: With Atypical Features

311 Depressive Disorder NOS (381

BIPOLAR DISORDERS (382)

296.xx Bipolar I Disorder (382)
.0x Single Manic Episode[a,c,f]
Specify if: Mixed
.40 Most Recent Episode Hypomanic[g,h,i]
.4x Most Recent Episode Manic[a,c,f,g,h,i]

.6x Most Recent Episode Mixed[a,c,f,g,h,i]
.5x Most Recent Episode Depressed[a,b,c,d,e,f,g,h,i]
.7 Most Recent Episode Unspecified[g,h,i]
296.89 Bipolar II Disorder[a,b,c,d,e,f,g,h,i] (392)
Specify (current or most recent episode): Hypomanic/Depressed
301.13 Cyclothymic Disorder (398)
296.80 Bipolar Disorder NOS (400)
293.83 Mood Disorder Due to . . . *[Indicate the General Medical Condition]* (401)
Specify type: With Depressive Features/With Major Depressive–Like Episode/With Manic Features/With Mixed Features
—.— Substance-Induced Mood Disorder *(refer to Substance-Related Disorders for substance-specific codes)* (405)
Specify type: With Depressive Features/With Manic Features/With Mixed Features
Specify if: With Onset During Intoxication/With Onset During Withdrawal
296.90 Mood Disorder NOS (410)

Anxiety Disorders (429)

300.01 Panic Disorder Without Agoraphobia (433)
300.21 Panic Disorder With Agoraphobia (433)
300.22 Agoraphobia Without History of Panic Disorder (441)
300.29 Specific Phobia (443)
Specify type: Animal Type/Natural Environment Type/Blood-Injection-Injury Type/Situational Type/Other Type
300.23 Social Phobia (450)
Specify if: Generalized
300.3 Obsessive-Compulsive Disorder (456)
Specify if: With Poor Insight
309.81 Posttraumatic Stress Disorder (463)
Specify if: Acute/Chronic
Specify if: With Delayed Onset
308.3 Acute Stress Disorder (469)
300.02 Generalized Anxiety Disorder (472)
293.84 Anxiety Disorder Due to . . . *[Indicate the General Medical Condition]* (476)
Specify if: With Generalized Anxiety/With Panic Attacks/With Obsessive-Compulsive Symptoms
—.— Substance-Induced Anxiety Disorder *(refer to Substance-Related Disorders for substance-specific codes)* (479)
Specify if: With Generalized Anxiety/With Panic Attacks/With Obsessive-Compulsive Symptoms/With Phobic Symptoms
Specify if: With Onset During Intoxication/With Onset During Withdrawal
300.00 Anxiety Disorder NOS (484)

Somatoform Disorders (485)

300.81 Somatization Disorder (486)
300.82 Undifferentiated Somatoform Disorder (490)
300.11 Conversion Disorder (492)
Specify type: With Motor Symptom or Deficit/With Sensory Symptom or Deficit/With Seizures or Convulsions/With Mixed Presentation
307.xx Pain Disorder (498)
.80 Associated With Psychological Factors
.89 Associated With Both Psychological Factors and a General Medical Condition
Specify if: Acute/Chronic

Factitious Disorders (513)

Dissociative Disorders (519)

Sexual and Gender Identity Disorders (535)

SEXUAL DYSFUNCTIONS (535)

The following specifiers apply to all primary Sexual Dysfunctions:

Sexual Desire Disorders (539)

Sexual Arousal Disorders (543)

Orgasmic Disorders (547)

Sexual Pain Disorders (554)

Sexual Dysfunction Due to a General Medical Condition (558)

625.8 Other Female Sexual Dysfunction Due to . . . *[Indicate the General Medical Condition]* (558)

608.89 Other Male Sexual Dysfunction Due to . . . *[Indicate the General Medical Condition]* (558)

—.— Substance-Induced Sexual Dysfunction *(refer to Substance-Related Disorders for substance-specific codes)* (562)
Specify if: With Impaired Desire/With Impaired Arousal/With Impaired Orgasm/With Sexual Pain
Specify if: With Onset During Intoxication

302.70 Sexual Dysfunction NOS (565)

PARAPHILIAS (566)

302.4 Exhibitionism (569)

302.81 Fetishism (569)

302.89 Frotteurism (570)

302.2 Pedophilia (571)
Specify if: Sexually Attracted to Males/Sexually Attracted to Females/Sexually Attracted to Both
Specify if: Limited to Incest
Specify type: Exclusive Type/Nonexclusive Type

302.83 Sexual Masochism (572)

302.84 Sexual Sadism (573)

302.3 Transvestic Fetishism (574)
Specify if: With Gender Dysphoria

302.82 Voyeurism (575)

302.9 Paraphilia NOS (576)

GENDER IDENTITY DISORDERS (576)

302.xx Gender Identity Disorder (576)
.6 in Children
.85 in Adolescents or Adults
Specify if: Sexually Attracted to Males/Sexually Attracted to Females/Sexually Attracted to Both/Sexually Attracted to Neither

302.6 Gender Identity Disorder NOS (582)

302.9 Sexual Disorder NOS (582)

Eating Disorders (583)

307.1 Anorexia Nervosa (583)
Specify type: Restricting Type; Binge-Eating/Purging Type

307.51 Bulimia Nervosa (589)
Specify type: Purging Type/Nonpurging Type

307.50 Eating Disorder NOS (594)

Sleep Disorders (597)

PRIMARY SLEEP DISORDERS (598)

Dyssomnias (598)

307.42 Primary Insomnia (599)

307.44 Primary Hypersomnia (604)
Specify if: Recurrent

347 Narcolepsy (609)

780.59 Breathing-Related Sleep Disorder (615)

307.45 Circadian Rhythm Sleep Disorder (622)
Specify type: Delayed Sleep Phase Type/Jet Lag Type/Shift Work Type/Unspecified Type

307.47 Dyssomnia NOS (629)

Parasomnias (630)

307.47 Nightmare Disorder (631)

307.46 Sleep Terror Disorder (634)

307.46 Sleepwalking Disorder (639)

307.47 Parasomnia NOS (644)

SLEEP DISORDERS RELATED TO ANOTHER MENTAL DISORDER (645)

307.42 Insomnia Related to . . . *[Indicate the Axis I or Axis II Disorder]* (645)

307.44 Hypersomnia Related to . . . *[Indicate the Axis I or Axis II Disorder]* (645)

OTHER SLEEP DISORDERS (651)

780.xx Sleep Disorder Due to . . . *[Indicate the General Medical Condition]* (651)
- .52 Insomnia Type
- .54 Hypersomnia Type
- .59 Parasomnia Type
- .59 Mixed Type

—.— Substance-Induced Sleep Disorder *(refer to Substance-Related Disorders for substance-specific codes)* (655)

Specify type: Insomnia Type/Hypersomnia Type/Parasomnia Type/Mixed Type
Specify if: With Onset During Intoxication/With Onset During Withdrawal

Impulse-Control Disorders Not Elsewhere Classified (663)

312.34 Intermittent Explosive Disorder (663)
312.32 Kleptomania (667)
312.33 Pyromania (669)
312.31 Pathological Gambling (671)
312.39 Trichotillomania (674)
312.30 Impulse-Control Disorder NOS (677)

Adjustment Disorders (679)

309.xx Adjustment Disorder (679)
- .0 With Depressed Mood
- .24 With Anxiety
- .28 With Mixed Anxiety and Depressed Mood
- .3 With Disturbance of Conduct
- .4 With Mixed Disturbance of Emotions and Conduct
- .9 Unspecified

Specify if: Acute/Chronic

Personality Disorders (685)

Note: *These are coded on Axis II.*
301.0 Paranoid Personality Disorder (690)
301.20 Schizoid Personality Disorder (694)
301.22 Schizotypal Personality Disorder (697)
301.7 Antisocial Personality Disorder (701)
301.83 Borderline Personality Disorder (706)
301.50 Histrionic Personality Disorder (711)
301.81 Narcissistic Personality Disorder (714)
301.82 Avoidant Personality Disorder (718)
301.6 Dependent Personality Disorder (721)
301.4 Obsessive-Compulsive Personality Disorder (725)
301.9 Personality Disorder NOS (729)

Other Conditions That May Be a Focus of Clinical Attention (731)

PSYCHOLOGICAL FACTORS AFFECTING MEDICAL CONDITION (731)

316 . . . *[Specified Psychological Factor] Affecting . . . [Indicate the General Medical Condition]* (731)
Choose name based on nature of factors:
Mental Disorder Affecting Medical Condition
Psychological Symptoms Affecting Medical Condition

Personality Traits or Coping Style Affecting Medical Condition
Maladaptive Health Behaviors Affecting Medical Condition
Stress-Related Physiological Response Affecting Medical Condition
Other or Unspecified Psychological Factors Affecting Medical Condition

MEDICATION-INDUCED MOVEMENT DISORDERS (734)

332.1 Neuroleptic-Induced Parkinsonism (735)
333.92 Neuroleptic Malignant Syndrome (735)
333.7 Neuroleptic-Induced Acute Dystonia (735)
333.99 Neuroleptic-Induced Acute Akathisia (735)
333.82 Neuroleptic-Induced Tardive Dyskinesia (736)
333.1 Medication-Induced Postural Tremor (736)
333.90 Medication-Induced Movement Disorder NOS (736)

OTHER MEDICATION-INDUCED DISORDER (736)

995.2 Adverse Effects of Medication NOS (736)

RELATIONAL PROBLEMS (736)

V61.9 Relational Problem Related to a Mental Disorder or General Medical Condition (737)
V61.20 Parent-Child Relational Problem (737)
V61.10 Partner Relational Problem (737)
V61.8 Sibling Relational Problem (737)
V62.81 Relational Problem NOS (737)

PROBLEMS RELATED TO ABUSE OR NEGLECT (738)

V61.21 Physical Abuse of Child (738) *(code 995.54 if focus of attention is on victim)*
V61.21 Sexual Abuse of Child (738) *(code 995.53 if focus of attention is on victim)*
V61.21 Neglect of Child (738) *(code 995.52 if focus of attention is on victim)*
—.— Physical Abuse of Adult (738)
V61.12 (if by partner)
V62.83 (if by person other than partner) *(code 995.81 if focus of attention is on victim)*
—.— Sexual Abuse of Adult (738)
V61.12 (if by partner)
V62.83 (if by person other than partner) *(code 995.83 if focus of attention is on victim)*

ADDITIONAL CONDITIONS THAT MAY BE A FOCUS OF CLINICAL ATTENTION (739)

V15.81 Noncompliance With Treatment (739)
V65.2 Malingering (739)
V71.01 Adult Antisocial Behavior (740)
V71.02 Child or Adolescent Antisocial Behavior (740)
V62.89 Borderline Intellectual Functioning (740)
Note: This is coded on Axis II.
780.9 Age-Related Cognitive Decline (740)
V62.82 Bereavement (740)
V62.3 Academic Problem (741)
V62.2 Occupational Problem (741)
313.82 Identity Problem (741)
V62.89 Religious or Spiritual Problem (741)
V62.4 Acculturation Problem (741)
V62.89 Phase of Life Problem (742)

Additional Codes (743)

300.9 Unspecified Mental Disorder (nonpsychotic) (743)
V71.09 No Diagnosis or Condition on Axis I (743)
799.9 Diagnosis or Condition Deferred on Axis I (743)
V71.09 No Diagnosis on Axis II (743)
799.9 Diagnosis Deferred on Axis II (743)

Multiaxial System

Axis I Clinical Disorders
Other Conditions That May Be a Focus of Clinical Attention
Axis II Personality Disorders
Mental Retardation
Axis III General Medical Conditions
Axis IV Psychosocial and Environmental Problems
Axis V Global Assessment of Functioning

Multiaxial Assessment

A multiaxial system involves an assessment on several axes, each of which refers to a different domain of information that may help the clinician plan treatment and predict outcome. There are five axes included in the DSM-IV multiaxial classification:

Axis I	Clinical Disorders
	Other Conditions That May Be a Focus of Clinical Attention
Axis II	Personality Disorders
	Mental Retardation
Axis III	General Medical Conditions
Axis IV	Psychosocial and Environmental Problems
Axis V	Global Assessment of Functioning

The use of the multiaxial system facilitates comprehensive and systematic evaluation with attention to the various mental disorders and general medical conditions, psychosocial and environmental problems, and level of functioning that might be overlooked if the focus were on assessing a single presenting problem. A multiaxial system provides a convenient format for organizing and communicating clinical information, for capturing the complexity of clinical situations, and for describing the heterogeneity of individuals presenting with the same diagnosis. In addition, the multiaxial system promotes the application of the biopsychosocial model in clinical, educational, and research settings.

The rest of this section provides a description of each of the DSM-IV axes. In some settings or situations, clinicians may prefer not to use the multiaxial system. For this reason, guidelines for reporting the results of a DSM-IV assessment without applying the formal multiaxial system are provided at the end of this section.

Axis I: Clinical Disorders
Other Conditions That May Be a Focus of Clinical Attention

Axis I is for reporting all the various disorders or conditions in the Classification except for the Personality Disorders and Mental Retardation (which are reported on Axis II). The major groups of disorders to be reported on Axis I are listed in the box below. Also reported on Axis I are Other Conditions That May Be a Focus of Clinical Attention.

When an individual has more than one Axis I disorder, all of these should be reported (for examples, see p. 35). If more than one Axis I disorder is present, the principal diagnosis or the reason for visit (see p. 3) should be indicated by listing it first. When an individual has both an Axis I and an Axis II disorder, the principal diagnosis or the

reason for visit will be assumed to be on Axis I unless the Axis II diagnosis is followed by the qualifying phrase "(Principal Diagnosis)" or "(Reason for Visit)." If no Axis I disorder is present, this should be coded as V71.09. If an Axis I diagnosis is deferred, pending the gathering of additional information, this should be coded as 799.9.

Axis I
Clinical Disorders
Other Conditions That May Be a Focus of Clinical Attention

Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence
(excluding Mental Retardation, which is diagnosed on Axis II)
Delirium, Dementia, and Amnestic and Other Cognitive Disorders
Mental Disorders Due to a General Medical Condition
Substance-Related Disorders
Schizophrenia and Other Psychotic Disorders
Mood Disorders
Anxiety Disorders
Somatoform Disorders
Factitious Disorders
Dissociative Disorders
Sexual and Gender Identity Disorders
Eating Disorders
Sleep Disorders
Impulse-Control Disorders Not Elsewhere Classified
Adjustment Disorders
Other Conditions That May Be a Focus of Clinical Attention

Axis II: Personality Disorders Mental Retardation

Axis II is for reporting Personality Disorders and Mental Retardation. It may also be used for noting prominent maladaptive personality features and defense mechanisms. The listing of Personality Disorders and Mental Retardation on a separate axis ensures that consideration will be given to the possible presence of Personality Disorders and Mental Retardation that might otherwise be overlooked when attention is directed to the usually more florid Axis I disorders. The coding of Personality Disorders on Axis II should not be taken to imply that their pathogenesis or range of appropriate treatment is fundamentally different from that for the disorders coded on Axis I. The disorders to be reported on Axis II are listed in the box below.

In the common situation in which an individual has more than one Axis II diagnosis, all should be reported (for examples, see p. 35). When an individual has both an Axis I and an Axis II diagnosis and the Axis II diagnosis is the principal diagnosis or the reason for visit, this should be indicated by adding the qualifying phrase "(Principal Diagnosis)" or "(Reason for Visit)" after the Axis II diagnosis. If no Axis II dis-

order is present, this should be coded as V71.09. If an Axis II diagnosis is deferred, pending the gathering of additional information, this should be coded as 799.9.

Axis II may also be used to indicate prominent maladaptive personality features that do not meet the threshold for a Personality Disorder (in such instances, no code number should be used—see Example 3 on p. 37). The habitual use of maladaptive defense mechanisms may also be indicated on Axis II (see Appendix B, p. 811, for definitions and Example 1 on p. 37).

Axis II
Personality Disorders
Mental Retardation

Paranoid Personality Disorder	Narcissistic Personality Disorder
Schizoid Personality Disorder	Avoidant Personality Disorder
Schizotypal Personality Disorder	Dependent Personality Disorder
Antisocial Personality Disorder	Obsessive-Compulsive Personality Disorder
Borderline Personality Disorder	Personality Disorder Not Otherwise Specified
Histrionic Personality Disorder	Mental Retardation

Axis III: General Medical Conditions

Axis III is for reporting current general medical conditions that are potentially relevant to the understanding or management of the individual's mental disorder. These conditions are classified outside the "Mental Disorders" chapter of ICD-9-CM (and outside Chapter V of ICD-10). A listing of the broad categories of general medical conditions is given in the box below. (For a more detailed listing including the specific ICD-9-CM codes, refer to Appendix G.)

As discussed in the "Introduction," the multiaxial distinction among Axis I, Axis II, and Axis III disorders does not imply that there are fundamental differences in their conceptualization, that mental disorders are unrelated to physical or biological factors or processes, or that general medical conditions are unrelated to behavioral or psychosocial factors or processes. The purpose of distinguishing general medical conditions is to encourage thoroughness in evaluation and to enhance communication among health care providers.

General medical conditions can be related to mental disorders in a variety of ways. In some cases it is clear that the general medical condition is directly etiological to the development or worsening of mental symptoms and that the mechanism for this effect is physiological. When a mental disorder is judged to be a direct physiological consequence of the general medical condition, a Mental Disorder Due to a General Medical Condition should be diagnosed on Axis I and the general medical condition should be recorded on both Axis I and Axis III. For example, when hypothyroidism is a direct cause of depressive symptoms, the designation on Axis I is 293.83 Mood Disorder Due to Hypothyroidism, With Depressive Features, and the hypothyroidism is listed again and coded on Axis III as 244.9 (see Example 3, p. 37). For a further discussion, see p. 181.

In those instances in which the etiological relationship between the general medical condition and the mental symptoms is insufficiently clear to warrant an Axis I diagnosis of Mental Disorder Due to a General Medical Condition, the appropriate mental disorder (e.g., Major Depressive Disorder) should be listed and coded on Axis I; the general medical condition should only be coded on Axis III.

There are other situations in which general medical conditions are recorded on Axis III because of their importance to the overall understanding or treatment of the individual with the mental disorder. An Axis I disorder may be a psychological reaction to an Axis III general medical condition (e.g., the development of 309.0 Adjustment Disorder With Depressed Mood as a reaction to the diagnosis of carcinoma of the breast). Some general medical conditions may not be directly related to the mental disorder but nonetheless have important prognostic or treatment implications (e.g., when the diagnosis on Axis I is 296.30 Major Depressive Disorder, Recurrent, and on Axis III is 427.9 arrhythmia, the choice of pharmacotherapy is influenced by the general medical condition; or when a person with diabetes mellitus is admitted to the hospital for an exacerbation of Schizophrenia and insulin management must be monitored).

When an individual has more than one clinically relevant Axis III diagnosis, all should be reported. For examples, see p. 35. If no Axis III disorder is present, this should be indicated by the notation "Axis III: None." If an Axis III diagnosis is deferred, pending the gathering of additional information, this should be indicated by the notation "Axis III: Deferred."

Axis III

General Medical Conditions (with ICD-9-CM codes)

Infectious and Parasitic Diseases (001–139)
Neoplasms (140–239)
Endocrine, Nutritional, and Metabolic Diseases and Immunity Disorders (240–279)
Diseases of the Blood and Blood-Forming Organs (280–289)
Diseases of the Nervous System and Sense Organs (320–389)
Diseases of the Circulatory System (390–459)
Diseases of the Respiratory System (460–519)
Diseases of the Digestive System (520–579)
Diseases of the Genitourinary System (580–629)
Complications of Pregnancy, Childbirth, and the Puerperium (630–676)
Diseases of the Skin and Subcutaneous Tissue (680–709)
Diseases of the Musculoskeletal System and Connective Tissue (710–739)
Congenital Anomalies (740–759)
Certain Conditions Originating in the Perinatal Period (760–779)
Symptoms, Signs, and Ill-Defined Conditions (780–799)
Injury and Poisoning (800–999)

Axis IV: Psychosocial and Environmental Problems

Axis IV is for reporting psychosocial and environmental problems that may affect the diagnosis, treatment, and prognosis of mental disorders (Axes I and II). A psychosocial or environmental problem may be a negative life event, an environmental difficulty or deficiency, a familial or other interpersonal stress, an inadequacy of social support or personal resources, or other problem relating to the context in which a person's difficulties have developed. So-called positive stressors, such as job promotion, should be listed only if they constitute or lead to a problem, as when a person has difficulty adapting to the new situation. In addition to playing a role in the initiation or exacerbation of a mental disorder, psychosocial problems may also develop as a consequence of a person's psychopathology or may constitute problems that should be considered in the overall management plan.

When an individual has multiple psychosocial or environmental problems, the clinician may note as many as are judged to be relevant. In general, the clinician should note only those psychosocial and environmental problems that have been present during the year preceding the current evaluation. However, the clinician may choose to note psychosocial and environmental problems occurring prior to the previous year if these clearly contribute to the mental disorder or have become a focus of treatment—for example, previous combat experiences leading to Posttraumatic Stress Disorder.

In practice, most psychosocial and environmental problems will be indicated on Axis IV. However, when a psychosocial or environmental problem is the primary focus of clinical attention, it should also be recorded on Axis I, with a code derived from the section "Other Conditions That May Be a Focus of Clinical Attention" (see p. 731).

For convenience, the problems are grouped together in the following categories:

- **Problems with primary support group**—e.g., death of a family member; health problems in family; disruption of family by separation, divorce, or estrangement; removal from the home; remarriage of parent; sexual or physical abuse; parental overprotection; neglect of child; inadequate discipline; discord with siblings; birth of a sibling
- **Problems related to the social environment**—e.g., death or loss of friend; inadequate social support; living alone; difficulty with acculturation; discrimination; adjustment to life-cycle transition (such as retirement)
- **Educational problems**—e.g., illiteracy; academic problems; discord with teachers or classmates; inadequate school environment
- **Occupational problems**—e.g., unemployment; threat of job loss; stressful work schedule; difficult work conditions; job dissatisfaction; job change; discord with boss or co-workers
- **Housing problems**—e.g., homelessness; inadequate housing; unsafe neighborhood; discord with neighbors or landlord
- **Economic problems**—e.g., extreme poverty; inadequate finances; insufficient welfare support
- **Problems with access to health care services**—e.g., inadequate health care services; transportation to health care facilities unavailable; inadequate health insurance

- **Problems related to interaction with the legal system/crime**—e.g., arrest; incarceration; litigation; victim of crime
- **Other psychosocial and environmental problems**—e.g., exposure to disasters, war, other hostilities; discord with nonfamily caregivers such as counselor, social worker, or physician; unavailability of social service agencies

When using the Multiaxial Evaluation Report Form (see p. 36), the clinician should identify the relevant categories of psychosocial and environmental problems and indicate the specific factors involved. If a recording form with a checklist of problem categories is not used, the clinician may simply list the specific problems on Axis IV. (See examples on p. 35.)

Axis IV
Psychosocial and Environmental Problems

Problems with primary support group
Problems related to the social environment
Educational problems
Occupational problems
Housing problems
Economic problems
Problems with access to health care services
Problems related to interaction with the legal system/crime
Other psychosocial and environmental problems

Axis V: Global Assessment of Functioning

Axis V is for reporting the clinician's judgment of the individual's overall level of functioning. This information is useful in planning treatment and measuring its impact, and in predicting outcome.

The reporting of overall functioning on Axis V can be done using the Global Assessment of Functioning (GAF) Scale. The GAF Scale may be particularly useful in tracking the clinical progress of individuals in global terms, using a single measure. The GAF Scale is to be rated with respect only to psychological, social, and occupational functioning. The instructions specify, "Do not include impairment in functioning due to physical (or environmental) limitations."

The GAF scale is divided into 10 ranges of functioning. Making a GAF rating involves picking a single value that best reflects the individual's overall level of functioning. The description of each 10-point range in the GAF scale has two components: the first part covers symptom severity, and the second part covers functioning. The GAF rating is within a particular decile if **either** the symptom severity **or** the level of functioning falls within the range. For example, the first part of the range 41–50 describes "serious symptoms (e.g., suicidal ideation, severe obsessional rituals, frequent shoplifting)" and the second part includes "any serious impairment in social, occupational, or school functioning (e.g., no friends, unable to keep a job)." It should be noted

that in situations where the individual's symptom severity and level of functioning are discordant, the final GAF rating always reflects the worse of the two. For example, the GAF rating for an individual who is a significant danger to self but is otherwise functioning well would be below 20. Similarly, the GAF rating for an individual with minimal psychological symptomatology but significant impairment in functioning (e.g., an individual whose excessive preoccupation with substance use has resulted in loss of job and friends but no other psychopathology) would be 40 or lower.

In most instances, ratings on the GAF Scale should be for the current period (i.e., the level of functioning at the time of the evaluation) because ratings of current functioning will generally reflect the need for treatment or care. In order to account for day-to-day variability in functioning, the GAF rating for the "current period" is sometimes operationalized as the lowest level of functioning for the past week. In some settings, it may be useful to note the GAF Scale rating both at time of admission and at time of discharge. The GAF Scale may also be rated for other time periods (e.g., the highest level of functioning for at least a few months during the past year). The GAF Scale is reported on Axis V as follows: "GAF = ," followed by the GAF rating from 0 to 100, followed by the time period reflected by the rating in parentheses—for example, "(current)," "(highest level in past year)," "(at discharge)." (See examples on p. 35.)

In order to ensure that no elements of the GAF scale are overlooked when a GAF rating is being made, the following method for determining a GAF rating may be applied:

STEP 1: Starting at the top level, evaluate each range by asking "is **either** the individual's symptom severity OR level of functioning worse than what is indicated in the range description?"

STEP 2: Keep moving down the scale until the range that best matches the individual's symptom severity OR the level of functioning is reached, **whichever is worse.**

STEP 3: Look at the next lower range as a double-check against having stopped prematurely. This range should be too severe on **both** symptom severity **and** level of functioning. If it is, the appropriate range has been reached (continue with step 4). If not, go back to step 2 and continue moving down the scale.

STEP 4: To determine the specific GAF rating within the selected 10-point range, consider whether the individual is functioning at the higher or lower end of the 10-point range. For example, consider an individual who hears voices that do not influence his behavior (e.g., someone with long-standing Schizophrenia who accepts his hallucinations as part of his illness). If the voices occur relatively infrequently (once a week or less), a rating of 39 or 40 might be most appropriate. In contrast, if the individual hears voices almost continuously, a rating of 31 or 32 would be more appropriate.

In some settings, it may be useful to assess social and occupational disability and to track progress in rehabilitation independent of the severity of the psychological symptoms. For this purpose, a proposed Social and Occupational Functioning Assessment Scale (SOFAS) (see p. 817) is included in Appendix B. Two additional proposed scales that may be useful in some settings—the Global Assessment of Relational Functioning (GARF) Scale (see p. 814) and the Defensive Functioning Scale (see p. 807)—are also included in Appendix B.

Global Assessment of Functioning (GAF) Scale

Consider psychological, social, and occupational functioning on a hypothetical continuum of mental health–illness. Do not include impairment in functioning due to physical (or environmental) limitations.

Code (Note: Use intermediate codes when appropriate, e.g., 45, 68, 72.)

100 | 91 **Superior functioning in a wide range of activities, life's problems never seem to get out of hand, is sought out by others because of his or her many positive qualities. No symptoms.**

90 | 81 **Absent or minimal symptoms** (e.g., mild anxiety before an exam), **good functioning in all areas, interested and involved in a wide range of activities, socially effective, generally satisfied with life, no more than everyday problems or concerns** (e.g., an occasional argument with family members).

80 | 71 **If symptoms are present, they are transient and expectable reactions to psychosocial stressors** (e.g., difficulty concentrating after family argument); **no more than slight impairment in social, occupational, or school functioning** (e.g., temporarily falling behind in schoolwork).

70 | 61 **Some mild symptoms** (e.g., depressed mood and mild insomnia) **OR some difficulty in social, occupational, or school functioning** (e.g., occasional truancy, or theft within the household), **but generally functioning pretty well, has some meaningful interpersonal relationships.**

60 | 51 **Moderate symptoms** (e.g., flat affect and circumstantial speech, occasional panic attacks) **OR moderate difficulty in social, occupational, or school functioning** (e.g., few friends, conflicts with peers or co-workers).

50 | 41 **Serious symptoms** (e.g., suicidal ideation, severe obsessional rituals, frequent shoplifting) **OR any serious impairment in social, occupational, or school functioning** (e.g., no friends, unable to keep a job).

40 | 31 **Some impairment in reality testing or communication** (e.g., speech is at times illogical, obscure, or irrelevant) **OR major impairment in several areas, such as work or school, family relations, judgment, thinking, or mood** (e.g., depressed man avoids friends, neglects family, and is unable to work; child frequently beats up younger children, is defiant at home, and is failing at school).

30 | 21 **Behavior is considerably influenced by delusions or hallucinations OR serious impairment in communication or judgment** (e.g., sometimes incoherent, acts grossly inappropriately, suicidal preoccupation) **OR inability to function in almost all areas** (e.g., stays in bed all day; no job, home, or friends).

20 | 11 **Some danger of hurting self or others** (e.g., suicide attempts without clear expectation of death; frequently violent; manic excitement) **OR occasionally fails to maintain minimal personal hygiene** (e.g., smears feces) **OR gross impairment in communication** (e.g., largely incoherent or mute).

10 | 1 **Persistent danger of severely hurting self or others** (e.g., recurrent violence) **OR persistent inability to maintain minimal personal hygiene OR serious suicidal act with clear expectation of death.**

0 Inadequate information.

The rating of overall psychological functioning on a scale of 0–100 was operationalized by Luborsky in the Health-Sickness Rating Scale (Luborsky L: "Clinicians' Judgments of Mental Health." *Archives of General Psychiatry* 7:407–417, 1962). Spitzer and colleagues developed a revision of the Health-Sickness Rating Scale called the Global Assessment Scale (GAS) (Endicott J, Spitzer RL, Fleiss JL, Cohen J: "The Global Assessment Scale: A Procedure for Measuring Overall Severity of Psychiatric Disturbance." *Archives of General Psychiatry* 33:766–771, 1976). A modified version of the GAS was included in DSM-III-R as the Global Assessment of Functioning (GAF) Scale.

Examples of How to Record Results of a DSM-IV Multiaxial Evaluation

Example 1:

Axis I	296.23	Major Depressive Disorder, Single Episode, Severe Without Psychotic Features
	305.00	Alcohol Abuse
Axis II	301.6	Dependent Personality Disorder
		Frequent use of denial
Axis III		None
Axis IV		Threat of job loss
Axis V	GAF = 35	(current)

Example 2:

Axis I	300.4	Dysthymic Disorder
	315.00	Reading Disorder
Axis II	V71.09	No diagnosis
Axis III	382.9	Otitis media, recurrent
Axis IV		Victim of child neglect
Axis V	GAF = 53	(current)

Example 3:

Axis I	293.83	Mood Disorder Due to Hypothyroidism, With Depressive Features
Axis II	V71.09	No diagnosis, histrionic personality features
Axis III	244.9	Hypothyroidism
	365.23	Chronic angle-closure glaucoma
Axis IV		None
Axis V	GAF = 45	(on admission)
	GAF = 65	(at discharge)

Example 4:

Axis I	V61.10	Partner Relational Problem
Axis II	V71.09	No diagnosis
Axis III		None
Axis IV		Unemployment
Axis V	GAF = 83	(highest level past year)

Multiaxial Evaluation Report Form

The following form is offered as one possibility for reporting multiaxial evaluations. In some settings, this form may be used exactly as is; in other settings, the form may be adapted to satisfy special needs.

AXIS I: Clinical Disorders
Other Conditions That May Be a Focus of Clinical Attention

Diagnostic code	DSM-IV name
___.__	_____
___.__	_____
___.__	_____

AXIS II: Personality Disorders
Mental Retardation

Diagnostic code	DSM-IV name
___.__	_____
___.__	_____

AXIS III: General Medical Conditions

ICD-9-CM code	ICD-9-CM name
___.__	_____
___.__	_____
___.__	_____

AXIS IV: Psychosocial and Environmental Problems

Check:

- ❑ **Problems with primary support group** *Specify:* _____
- ❑ **Problems related to the social environment** *Specify:* _____
- ❑ **Educational problems** *Specify:* _____
- ❑ **Occupational problems** *Specify:* _____
- ❑ **Housing problems** *Specify:* _____
- ❑ **Economic problems** *Specify:* _____
- ❑ **Problems with access to health care services** *Specify:* _____
- ❑ **Problems related to interaction with the legal system/crime** *Specify:* _____
- ❑ **Other psychosocial and environmental problems** *Specify:* _____

AXIS V: Global Assessment of Functioning Scale

Score: ___ ___ ___

Time frame: _____

Nonaxial Format

Clinicians who do not wish to use the multiaxial format may simply list the appropriate diagnoses. Those choosing this option should follow the general rule of recording as many coexisting mental disorders, general medical conditions, and other factors as are relevant to the care and treatment of the individual. The Principal Diagnosis or the Reason for Visit should be listed first.

The examples below illustrate the reporting of diagnoses in a format that does not use the multiaxial system.

Example 1:

296.23 Major Depressive Disorder, Single Episode, Severe Without Psychotic Features
305.00 Alcohol Abuse
301.6 Dependent Personality Disorder; Frequent use of denial

Example 2:

300.4 Dysthymic Disorder
315.00 Reading Disorder
382.9 Otitis media, recurrent

Example 3:

293.83 Mood Disorder Due to Hypothyroidism, With Depressive Features
244.9 Hypothyroidism
365.23 Chronic angle-closure glaucoma
Histrionic personality features

Example 4:

V61.10 Partner Relational Problem

Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence

The provision of a separate section for disorders that are usually first diagnosed in infancy, childhood, or adolescence is for convenience only and is not meant to suggest that there is any clear distinction between "childhood" and "adult" disorders. Although most individuals with these disorders present for clinical attention during childhood or adolescence, the disorders sometimes are not diagnosed until adulthood. Moreover, many disorders included in other sections of the manual often have an onset during childhood or adolescence. In evaluating an infant, child, or adolescent, the clinician should consider the diagnoses included in this section but also should refer to the disorders described elsewhere in this manual. Adults may also be diagnosed with disorders included in this section for Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence if their clinical presentation meets relevant diagnostic criteria (e.g., Stuttering, Pica). Moreover, if an adult had symptoms as a child that met full criteria for a disorder, but now presents with an attenuated or residual form, the In Partial Remission specifier may be indicated (e.g., Attention-Deficit/Hyperactivity Disorder, Combined Type, In Partial Remission). For most (but not all) DSM-IV disorders, a single criteria set is provided that applies to children, adolescents, and adults (e.g., if a child or adolescent has symptoms that meet the criteria for Major Depressive Disorder, this diagnosis should be given, regardless of the individual's age). The variations in the presentation of a disorder that are attributable to an individual's developmental stage are described in a section in the text titled "Specific Culture, Age, and Gender Features." Specific issues related to the diagnosis of Personality Disorders in children or adolescents are discussed on p. 687.

The following disorders are included in this section:

Mental Retardation. This disorder is characterized by significantly subaverage intellectual functioning (an IQ of approximately 70 or below) with onset before age 18 years and concurrent deficits or impairments in adaptive functioning. Separate codes are provided for **Mild, Moderate, Severe,** and **Profound Mental Retardation** and for **Mental Retardation, Severity Unspecified.**

Learning Disorders. These disorders are characterized by academic functioning that is substantially below that expected given the person's chronological age, measured intelligence, and age-appropriate education. The specific disorders included in this section are **Reading Disorder, Mathematics Disorder, Disorder of Written Expression,** and **Learning Disorder Not Otherwise Specified.**

Motor Skills Disorder. This includes **Developmental Coordination Disorder,** which is characterized by motor coordination that is substantially below that expected given the person's chronological age and measured intelligence.

Communication Disorders. These disorders are characterized by difficulties in speech or language and include **Expressive Language Disorder, Mixed Receptive-Expressive Language Disorder, Phonological Disorder, Stuttering,** and **Communication Disorder Not Otherwise Specified.**

Pervasive Developmental Disorders. These disorders are characterized by severe deficits and pervasive impairment in multiple areas of development. These include impairment in reciprocal social interaction, impairment in communication, and the presence of stereotyped behavior, interests, and activities. The specific disorders included in this section are **Autistic Disorder, Rett's Disorder, Childhood Disintegrative Disorder, Asperger's Disorder,** and **Pervasive Developmental Disorder Not Otherwise Specified.**

Attention-Deficit and Disruptive Behavior Disorders. This section includes **Attention-Deficit/Hyperactivity Disorder,** which is characterized by prominent symptoms of inattention and/or hyperactivity-impulsivity. Subtypes are provided for specifying the predominant symptom presentation: **Predominantly Inattentive Type, Predominantly Hyperactive-Impulsive Type,** and **Combined Type.** Also included in this section are the Disruptive Behavior Disorders: **Conduct Disorder** is characterized by a pattern of behavior that violates the basic rights of others or major age-appropriate societal norms or rules; **Oppositional Defiant Disorder** is characterized by a pattern of negativistic, hostile, and defiant behavior. This section also includes two Not Otherwise Specified categories: **Attention-Deficit/Hyperactivity Disorder Not Otherwise Specified** and **Disruptive Behavior Disorder Not Otherwise Specified.**

Feeding and Eating Disorders of Infancy or Early Childhood. These disorders are characterized by persistent disturbances in feeding and eating. The specific disorders included are **Pica, Rumination Disorder,** and **Feeding Disorder of Infancy or Early Childhood.** Note that Anorexia Nervosa and Bulimia Nervosa are included in the "Eating Disorders" section presented later in the manual (see p. 583).

Tic Disorders. These disorders are characterized by vocal and/or motor tics. The specific disorders included are **Tourette's Disorder, Chronic Motor or Vocal Tic Disorder, Transient Tic Disorder,** and **Tic Disorder Not Otherwise Specified.**

Elimination Disorders. This grouping includes **Encopresis,** the repeated passage of feces into inappropriate places, and **Enuresis,** the repeated voiding of urine into inappropriate places.

Other Disorders of Infancy, Childhood, or Adolescence. This grouping is for disorders that are not covered in the sections listed above. **Separation Anxiety Disorder** is characterized by developmentally inappropriate and excessive anxiety concerning

separation from home or from those to whom the child is attached. **Selective Mutism** is characterized by a consistent failure to speak in specific social situations despite speaking in other situations. **Reactive Attachment Disorder of Infancy or Early Childhood** is characterized by markedly disturbed and developmentally inappropriate social relatedness that occurs in most contexts and is associated with grossly pathogenic care. **Stereotypic Movement Disorder** is characterized by repetitive, seemingly driven, and nonfunctional motor behavior that markedly interferes with normal activities and at times may result in bodily injury. **Disorder of Infancy, Childhood, or Adolescence Not Otherwise Specified** is a residual category for coding disorders with onset in infancy, childhood, or adolescence that do not meet criteria for any specific disorder in the Classification.

Children or adolescents may present with problems requiring clinical attention that are not defined as mental disorders (e.g., Relational Problems, Problems Related to Abuse or Neglect, Bereavement, Borderline Intellectual Functioning, Academic Problem, Child or Adolescent Antisocial Behavior, Identity Problem). These are listed at the end of the manual in the section "Other Conditions That May Be a Focus of Clinical Attention" (see p. 731).

DSM-III-R included two anxiety disorders specific to children and adolescents, Overanxious Disorder of Childhood and Avoidant Disorder of Childhood, that have been subsumed under Generalized Anxiety Disorder and Social Phobia, respectively, because of similarities in essential features.

Mental Retardation

Diagnostic Features

The essential feature of Mental Retardation is significantly subaverage general intellectual functioning (Criterion A) that is accompanied by significant limitations in adaptive functioning in at least two of the following skill areas: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety (Criterion B). The onset must occur before age 18 years (Criterion C). Mental Retardation has many different etiologies and may be seen as a final common pathway of various pathological processes that affect the functioning of the central nervous system.

General intellectual functioning is defined by the intelligence quotient (IQ or IQ-equivalent) obtained by assessment with one or more of the standardized, individually administered intelligence tests (e.g., Wechsler Intelligence Scales for Children, 3rd Edition; Stanford-Binet, 4th Edition; Kaufman Assessment Battery for Children). Significantly subaverage intellectual functioning is defined as an IQ of about 70 or below (approximately 2 standard deviations below the mean). It should be noted that there is a measurement error of approximately 5 points in assessing IQ, although this may vary from instrument to instrument (e.g., a Wechsler IQ of 70 is considered to represent a range of 65–75). Thus, it is possible to diagnose Mental Retardation in

individuals with IQs between 70 and 75 who exhibit significant deficits in adaptive behavior. Conversely, Mental Retardation would not be diagnosed in an individual with an IQ lower than 70 if there are no significant deficits or impairments in adaptive functioning. The choice of testing instruments and interpretation of results should take into account factors that may limit test performance (e.g., the individual's sociocultural background, native language, and associated communicative, motor, and sensory handicaps). When there is significant scatter in the subtest scores, the profile of strengths and weaknesses, rather than the mathematically derived full-scale IQ, will more accurately reflect the person's learning abilities. When there is a marked discrepancy across verbal and performance scores, averaging to obtain a full-scale IQ score can be misleading.

Impairments in adaptive functioning, rather than a low IQ, are usually the presenting symptoms in individuals with Mental Retardation. *Adaptive functioning* refers to how effectively individuals cope with common life demands and how well they meet the standards of personal independence expected of someone in their particular age group, sociocultural background, and community setting. Adaptive functioning may be influenced by various factors, including education, motivation, personality characteristics, social and vocational opportunities, and the mental disorders and general medical conditions that may coexist with Mental Retardation. Problems in adaptation are more likely to improve with remedial efforts than is the cognitive IQ, which tends to remain a more stable attribute.

It is useful to gather evidence for deficits in adaptive functioning from one or more reliable independent sources (e.g., teacher evaluation and educational, developmental, and medical history). Several scales have also been designed to measure adaptive functioning or behavior (e.g., the Vineland Adaptive Behavior Scales and the American Association on Mental Retardation Adaptive Behavior Scale). These scales generally provide a clinical cutoff score that is a composite of performance in a number of adaptive skill domains. It should be noted that scores for certain individual domains are not included in some of these instruments and that individual domain scores may vary considerably in reliability. As in the assessment of intellectual functioning, consideration should be given to the suitability of the instrument to the person's sociocultural background, education, associated handicaps, motivation, and cooperation. For instance, the presence of significant handicaps invalidates many adaptive scale norms. In addition, behaviors that would normally be considered maladaptive (e.g., dependency, passivity) may be evidence of good adaptation in the context of a particular individual's life (e.g., in some institutional settings).

Degrees of Severity of Mental Retardation

Four degrees of severity can be specified, reflecting the level of intellectual impairment: Mild, Moderate, Severe, and Profound.

317	**Mild Mental Retardation:**	IQ level 50–55 to approximately 70
318.0	**Moderate Retardation:**	IQ level 35–40 to 50–55
318.1	**Severe Mental Retardation:**	IQ level 20–25 to 35–40
318.2	**Profound Mental Retardation:**	IQ level below 20 or 25

319 Mental Retardation, Severity Unspecified, can be used when there is a strong presumption of Mental Retardation but the person's intelligence is untestable by standard tests (e.g., with individuals too impaired or uncooperative, or with infants).

317 Mild Mental Retardation

Mild Mental Retardation is roughly equivalent to what used to be referred to as the educational category of "educable." This group constitutes the largest segment (about 85%) of those with the disorder. As a group, people with this level of Mental Retardation typically develop social and communication skills during the preschool years (ages 0–5 years), have minimal impairment in sensorimotor areas, and often are not distinguishable from children without Mental Retardation until a later age. By their late teens, they can acquire academic skills up to approximately the sixth-grade level. During their adult years, they usually achieve social and vocational skills adequate for minimum self-support, but may need supervision, guidance, and assistance, especially when under unusual social or economic stress. With appropriate supports, individuals with Mild Mental Retardation can usually live successfully in the community, either independently or in supervised settings.

318.0 Moderate Mental Retardation

Moderate Mental Retardation is roughly equivalent to what used to be referred to as the educational category of "trainable." This outdated term should not be used because it wrongly implies that people with Moderate Mental Retardation cannot benefit from educational programs. This group constitutes about 10% of the entire population of people with Mental Retardation. Most of the individuals with this level of Mental Retardation acquire communication skills during early childhood years. They profit from vocational training and, with moderate supervision, can attend to their personal care. They can also benefit from training in social and occupational skills but are unlikely to progress beyond the second-grade level in academic subjects. They may learn to travel independently in familiar places. During adolescence, their difficulties in recognizing social conventions may interfere with peer relationships. In their adult years, the majority are able to perform unskilled or semiskilled work under supervision in sheltered workshops or in the general workforce. They adapt well to life in the community, usually in supervised settings.

318.1 Severe Mental Retardation

The group with Severe Mental Retardation constitutes 3%–4% of individuals with Mental Retardation. During the early childhood years, they acquire little or no communicative speech. During the school-age period, they may learn to talk and can be trained in elementary self-care skills. They profit to only a limited extent from instruction in pre-academic subjects, such as familiarity with the alphabet and simple counting, but can master skills such as learning sight reading of some "survival" words. In their adult years, they may be able to perform simple tasks in closely supervised set-

tings. Most adapt well to life in the community, in group homes or with their families, unless they have an associated handicap that requires specialized nursing or other care.

318.2 Profound Mental Retardation

The group with Profound Mental Retardation constitutes approximately 1%–2% of people with Mental Retardation. Most individuals with this diagnosis have an identified neurological condition that accounts for their Mental Retardation. During the early childhood years, they display considerable impairments in sensorimotor functioning. Optimal development may occur in a highly structured environment with constant aid and supervision and an individualized relationship with a caregiver. Motor development and self-care and communication skills may improve if appropriate training is provided. Some can perform simple tasks in closely supervised and sheltered settings.

319 Mental Retardation, Severity Unspecified

The diagnosis of Mental Retardation, Severity Unspecified, should be used when there is a strong presumption of Mental Retardation but the person cannot be successfully tested by standardized intelligence tests. This may be the case when children, adolescents, or adults are too impaired or uncooperative to be tested or, with infants, when there is a clinical judgment of significantly subaverage intellectual functioning, but the available tests (e.g., the Bayley Scales of Infant Development, Cattell Infant Intelligence Scales, and others) do not yield IQ values. In general, the younger the age, the more difficult it is to assess for the presence of Mental Retardation except in those with profound impairment.

Recording Procedures

The specific diagnostic code for Mental Retardation is selected based on the level of severity as indicated above and is coded on Axis II. If Mental Retardation is associated with another mental disorder (e.g., Autistic Disorder), the additional mental disorder is coded on Axis I. If Mental Retardation is associated with a general medical condition (e.g., Down syndrome), the general medical condition is coded on Axis III.

Associated Features and Disorders

Associated descriptive features and mental disorders. No specific personality and behavioral features are uniquely associated with Mental Retardation. Some individuals with Mental Retardation are passive, placid, and dependent, whereas others can be aggressive and impulsive. Lack of communication skills may predispose to disruptive and aggressive behaviors that substitute for communicative language. Some general medical conditions associated with Mental Retardation are characterized by certain behavioral symptoms (e.g., the intractable self-injurious behavior associated with Lesch-Nyhan syndrome). Individuals with Mental Retardation may be

vulnerable to exploitation by others (e.g., being physically and sexually abused) or being denied rights and opportunities.

Individuals with Mental Retardation have a prevalence of comorbid mental disorders that is estimated to be three to four times greater than in the general population. In some cases, this may result from a shared etiology that is common to Mental Retardation and the associated mental disorder (e.g., head trauma may result in Mental Retardation and in Personality Change Due to Head Trauma). All types of mental disorders may be seen, and there is no evidence that the nature of a given mental disorder is different in individuals who have Mental Retardation. The diagnosis of comorbid mental disorders is, however, often complicated by the fact that the clinical presentation may be modified by the severity of the Mental Retardation and associated handicaps. Deficits in communication skills may result in an inability to provide an adequate history (e.g., the diagnosis of Major Depressive Disorder in a nonverbal adult with Mental Retardation is often based primarily on manifestations such as depressed mood, irritability, anorexia, or insomnia that are observed by others). More often than is the case in individuals without Mental Retardation, it may be difficult to choose a specific diagnosis and in such cases the appropriate Not Otherwise Specified category can be used (e.g., Depressive Disorder Not Otherwise Specified). The most common associated mental disorders are Attention-Deficit/Hyperactivity Disorder, Mood Disorders, Pervasive Developmental Disorders, Stereotypic Movement Disorder, and Mental Disorders Due to a General Medical Condition (e.g., Dementia Due to Head Trauma). Individuals who have Mental Retardation due to Down syndrome may be at higher risk for developing Dementia of the Alzheimer's Type. Pathological changes in the brain associated with this disorder usually develop by the time these individuals are in their early 40s, although the clinical symptoms of dementia are not evident until later.

Associations have been reported between specific etiological factors and certain comorbid symptoms and mental disorders. For example, fragile X syndrome appears to increase the risk for Attention-Deficit/Hyperactivity Disorder and Social Phobia; individuals with Prader-Willi syndrome may exhibit hyperphagia and compulsivity, and those with William's syndrome may have an increased risk of Anxiety Disorders and Attention-Deficit/Hyperactivity Disorder.

Predisposing factors. Etiological factors may be primarily biological or primarily psychosocial, or some combination of both. In approximately 30%–40% of individuals seen in clinical settings, no clear etiology for the Mental Retardation can be determined despite extensive evaluation efforts. Specific etiologies are more likely to be identified in individuals with Severe or Profound Mental Retardation. The major predisposing factors include:

Heredity: These factors include inborn errors of metabolism inherited mostly through autosomal recessive mechanisms (e.g., Tay-Sachs disease), other single-gene abnormalities with Mendelian inheritance and variable expression (e.g., tuberous sclerosis), and chromosomal aberrations (e.g., translocation Down syndrome, fragile X syndrome). Advances in genetics will likely increase the identification of heritable forms of Mental Retardation.

Early alterations of embryonic development: These factors include chromosomal changes (e.g., Down syndrome due to trisomy) or prenatal damage due to toxins (e.g., maternal alcohol consumption, infections).

Environmental influences: These factors include deprivation of nurturance and of social, linguistic, and other stimulation.

Mental disorders: These factors include Autistic Disorder and other Pervasive Developmental Disorders.

Pregnancy and perinatal problems: These factors include fetal malnutrition, prematurity, hypoxia, viral and other infections, and trauma.

General medical conditions acquired in infancy or childhood: These factors include infections, traumas, and poisoning (e.g., due to lead).

Associated laboratory findings. Other than the results of psychological and adaptive behavior tests that are necessary for the diagnosis of Mental Retardation, there are no laboratory findings that are uniquely associated with Mental Retardation. Diagnostic laboratory findings may be associated with a specific accompanying general medical condition (e.g., chromosomal findings in various genetic conditions, high blood phenylalanine in phenylketonuria, or abnormalities on central nervous system imaging).

Associated physical examination findings and general medical conditions. There are no specific physical features associated with Mental Retardation. When Mental Retardation is part of a specific syndrome, the clinical features of that syndrome will be present (e.g., the physical features of Down syndrome). The more severe the Mental Retardation (especially if it is severe or profound), the greater the likelihood of neurological (e.g., seizures), neuromuscular, visual, auditory, cardiovascular, and other conditions.

Specific Culture, Age, and Gender Features

Care should be taken to ensure that intellectual testing procedures reflect adequate attention to the individual's ethnic, cultural, or linguistic background. This is usually accomplished by using tests in which the individual's relevant characteristics are represented in the standardization sample of the test or by employing an examiner who is familiar with aspects of the individual's ethnic or cultural background. Individualized testing is always required to make the diagnosis of Mental Retardation. The prevalence of Mental Retardation due to known biological factors is similar among children of upper and lower socioeconomic classes, except that certain etiological factors are linked to lower socioeconomic status (e.g., lead poisoning and premature births). In cases in which no specific biological causation can be identified, the Mental Retardation is usually milder (although all degrees of severity are represented) and individuals from lower socioeconomic classes are overrepresented. Developmental considerations should be taken into account in evaluating impairment in adaptive skills because certain of the skill areas are less relevant at different ages (e.g., use of community resources or employment in school-age children). Mental Retardation is more common among males, with a male-to-female ratio of approximately 1.5:1.

Prevalence

The prevalence rate of Mental Retardation has been estimated at approximately 1%. However, different studies have reported different rates depending on definitions used, methods of ascertainment, and population studied.

Course

The diagnosis of Mental Retardation requires that the onset of the disorder be before age 18 years. The age and mode of onset depend on the etiology and severity of the Mental Retardation. More severe retardation, especially when associated with a syndrome with a characteristic phenotype, tends to be recognized early (e.g., Down syndrome is usually diagnosed at birth). In contrast, Mild Retardation of unknown origin is generally noticed later. In more severe retardation resulting from an acquired cause, the intellectual impairment will develop more abruptly (e.g., retardation following an encephalitis). The course of Mental Retardation is influenced by the course of underlying general medical conditions and by environmental factors (e.g., educational and other opportunities, environmental stimulation, and appropriateness of management). If an underlying general medical condition is static, the course is more likely to be variable and to depend on environmental factors. Mental Retardation is not necessarily a lifelong disorder. Individuals who had Mild Mental Retardation earlier in their lives manifested by failure in academic learning tasks may, with appropriate training and opportunities, develop good adaptive skills in other domains and may no longer have the level of impairment required for a diagnosis of Mental Retardation.

Familial Pattern

Because of its heterogeneous etiology, no familial pattern is applicable to Mental Retardation as a general category. The heritability of Mental Retardation is discussed under "Predisposing Factors" (see p. 45).

Differential Diagnosis

The diagnostic criteria for Mental Retardation do not include an exclusion criterion; therefore, the diagnosis should be made whenever the diagnostic criteria are met, regardless of and in addition to the presence of another disorder. In **Learning Disorders** or **Communication Disorders** (unassociated with Mental Retardation), the development in a specific area (e.g., reading, expressive language) is impaired but there is no generalized impairment in intellectual development and adaptive functioning. A Learning Disorder or Communication Disorder can be diagnosed in an individual with Mental Retardation if the specific deficit is out of proportion to the severity of the Mental Retardation. In **Pervasive Developmental Disorders,** there is qualitative impairment in the development of reciprocal social interaction and in the development of verbal and nonverbal social communication skills. Mental Retardation often accompanies Pervasive Developmental Disorders.

Some cases of Mental Retardation have their onset after a period of normal functioning and may qualify for the additional diagnosis of **dementia.** A diagnosis of dementia requires that the memory impairment and other cognitive deficits represent a significant decline from a previously higher level of functioning. Because it may be difficult to determine the previous level of functioning in very young children, the diagnosis of dementia may not be appropriate until the child is between ages 4 and 6 years. In general, for individuals under age 18 years, the diagnosis of dementia is

made only when the condition is not characterized satisfactorily by the diagnosis of Mental Retardation alone.

Borderline Intellectual Functioning (see p. 740) describes an IQ range that is higher than that for Mental Retardation (generally 71–84). As discussed earlier, an IQ score may involve a measurement error of approximately 5 points, depending on the testing instrument. Thus, it is possible to diagnose Mental Retardation in individuals with IQ scores between 71 and 75 if they have significant deficits in adaptive behavior that meet the criteria for Mental Retardation. Differentiating Mild Mental Retardation from Borderline Intellectual Functioning requires careful consideration of all available information.

Relationship to Other Classifications of Mental Retardation

The classification system of the American Association on Mental Retardation (AAMR) includes the same three criteria (i.e., significantly subaverage intellectual functioning, limitations in adaptive skills, and onset prior to age 18 years). In the AAMR classification, the criterion of significantly subaverage intellectual functioning refers to a standard score of approximately 70–75 or below (which takes into account the potential measurement error of plus or minus 5 points in IQ testing). Furthermore, DSM-IV specifies levels of severity, whereas the AAMR 1992 classification system specifies "Patterns and Intensity of Supports Needed" (i.e., "Intermittent, Limited, Extensive, and Pervasive"), which are not directly comparable with the degrees of severity in DSM-IV. The definition of developmental disabilities in Public Law 95-602 (1978) is not limited to Mental Retardation and is based on functional criteria. This law defines *developmental disability* as a disability attributable to a mental or physical impairment, manifested before age 22 years, likely to continue indefinitely, resulting in substantial limitation in three or more specified areas of functioning, and requiring specific and lifelong or extended care.

Diagnostic criteria for Mental Retardation

A. Significantly subaverage intellectual functioning: an IQ of approximately 70 or below on an individually administered IQ test (for infants, a clinical judgment of significantly subaverage intellectual functioning).

B. Concurrent deficits or impairments in present adaptive functioning (i.e., the person's effectiveness in meeting the standards expected for his or her age by his or her cultural group) in at least two of the following areas: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety.

C. The onset is before age 18 years.

Code based on degree of severity reflecting level of intellectual impairment:

317 Mild Mental Retardation: IQ level 50–55 to approximately 70
318.0 Moderate Mental Retardation: IQ level 35–40 to 50–55
318.1 Severe Mental Retardation: IQ level 20–25 to 35–40
318.2 Profound Mental Retardation: IQ level below 20 or 25
319 Mental Retardation, Severity Unspecified: when there is strong presumption of Mental Retardation but the person's intelligence is untestable by standard tests

Learning Disorders (*formerly* Academic Skills Disorders)

The section on Learning Disorders includes Reading Disorder, Mathematics Disorder, Disorder of Written Expression, and Learning Disorder Not Otherwise Specified.

Diagnostic Features

Learning Disorders are diagnosed when the individual's achievement on individually administered, standardized tests in reading, mathematics, or written expression is substantially below that expected for age, schooling, and level of intelligence. The learning problems significantly interfere with academic achievement or activities of daily living that require reading, mathematical, or writing skills. A variety of statistical approaches can be used to establish that a discrepancy is significant. *Substantially below* is usually defined as a discrepancy of more than 2 standard deviations between achievement and IQ. A smaller discrepancy between achievement and IQ (i.e., between 1 and 2 standard deviations) is sometimes used, especially in cases where an individual's performance on an IQ test may have been compromised by an associated disorder in cognitive processing, a comorbid mental disorder or general medical condition, or the individual's ethnic or cultural background. If a sensory deficit is

present, the learning difficulties must be in excess of those usually associated with the deficit. Learning Disorders may persist into adulthood.

Associated Features and Disorders

Demoralization, low self-esteem, and deficits in social skills may be associated with Learning Disorders. The school drop-out rate for children or adolescents with Learning Disorders is reported at nearly 40% (or approximately 1.5 times the average). Adults with Learning Disorders may have significant difficulties in employment or social adjustment. Many individuals (10%–25%) with Conduct Disorder, Oppositional Defiant Disorder, Attention-Deficit/Hyperactivity Disorder, Major Depressive Disorder, or Dysthymic Disorder also have Learning Disorders. There is evidence that developmental delays in language may occur in association with Learning Disorders (particularly Reading Disorder), although these delays may not be sufficiently severe to warrant the separate diagnosis of a Communication Disorder. Learning Disorders may also be associated with a higher rate of Developmental Coordination Disorder.

There may be underlying abnormalities in cognitive processing (e.g., deficits in visual perception, linguistic processes, attention, or memory, or a combination of these) that often precede or are associated with Learning Disorders. Standardized tests to measure these processes are generally less reliable and valid than other psychoeducational tests. Although genetic predisposition, perinatal injury, and various neurological or other general medical conditions may be associated with the development of Learning Disorders, the presence of such conditions does not invariably predict an eventual Learning Disorder, and there are many individuals with Learning Disorders who have no such history. Learning Disorders are, however, frequently found in association with a variety of general medical conditions (e.g., lead poisoning, fetal alcohol syndrome, or fragile X syndrome).

Specific Culture Features

Care should be taken to ensure that intelligence testing procedures reflect adequate attention to the individual's ethnic or cultural background. This is usually accomplished by using tests in which the individual's relevant characteristics are represented in the standardization sample of the test or by employing an examiner who is familiar with aspects of the individual's ethnic or cultural background. Individualized testing is always required to make the diagnosis of a Learning Disorder.

Prevalence

Estimates of the prevalence of Learning Disorders range from 2% to 10% depending on the nature of ascertainment and the definitions applied. Approximately 5% of students in public schools in the United States are identified as having a Learning Disorder.

Differential Diagnosis

Learning Disorders must be differentiated from **normal variations in academic attainment** and from scholastic difficulties due to **lack of opportunity, poor teaching,** or **cultural factors.** Inadequate schooling can result in poor performance on standardized achievement tests. Children from ethnic or cultural backgrounds different from the prevailing school culture or in which English is not the primary language and children who have attended class in schools where teaching has been inadequate may score poorly on achievement tests. Children from these same backgrounds may also be at greater risk for absenteeism due to more frequent illnesses or impoverished or chaotic living environments.

Impaired vision or hearing may affect learning ability and should be investigated through audiometric or visual screening tests. A Learning Disorder may be diagnosed in the presence of such sensory deficits only if the learning difficulties are in excess of those usually associated with these deficits. Accompanying neurological or other general medical conditions should be coded on Axis III.

In **Mental Retardation,** learning difficulties are commensurate with general impairment in intellectual functioning. However, in some cases of Mild Mental Retardation, the level of achievement in reading, mathematics, or written expression is significantly below expected levels given the person's schooling and severity of Mental Retardation. In such cases, the additional diagnosis of the appropriate Learning Disorder should be made.

An additional Learning Disorder diagnosis should be made in the context of a **Pervasive Developmental Disorder** only when academic impairment is significantly below expected levels given the individual's intellectual functioning and schooling. In individuals with **Communication Disorders,** intellectual functioning may have to be assessed using standardized measures of nonverbal intellectual capacity. In cases in which academic achievement is significantly below this measured capacity, the appropriate Learning Disorder should be diagnosed.

Mathematics Disorder and **Disorder of Written Expression** most commonly occur in combination with **Reading Disorder.** When criteria are met for more than one Learning Disorder, all should be diagnosed.

315.00 Reading Disorder

Diagnostic Features

The essential feature of Reading Disorder is reading achievement (i.e., reading accuracy, speed, or comprehension as measured by individually administered standardized tests) that falls substantially below that expected given the individual's chronological age, measured intelligence, and age-appropriate education (Criterion A). The disturbance in reading significantly interferes with academic achievement or with activities of daily living that require reading skills (Criterion B). If a sensory deficit is present, the reading difficulties are in excess of those usually associated with it (Criterion C). If a neurological or other general medical condition or sensory deficit is present, it should be coded on Axis III. In individuals with Reading Disorder (which

has also been called "dyslexia"), oral reading is characterized by distortions, substitutions, or omissions; both oral and silent reading are characterized by slowness and errors in comprehension.

Associated Features and Disorders

See the "Associated Features and Disorders" section for Learning Disorders (p. 50). Mathematics Disorder and Disorder of Written Expression are commonly associated with Reading Disorder, and it is relatively rare for either of these disorders to be found in the absence of Reading Disorder.

Specific Gender Features

From 60% to 80% of individuals diagnosed with Reading Disorder are males. Referral procedures may often be biased toward identifying males, because they more frequently display disruptive behaviors in association with Learning Disorders. The disorder has been found to occur at more equal rates in males and females when careful diagnostic ascertainment and stringent criteria are used rather than traditional school-based referral and diagnostic procedures.

Prevalence

The prevalence of Reading Disorder is difficult to establish because many studies focus on the prevalence of Learning Disorders without careful separation into specific disorders of Reading, Mathematics, or Written Expression. Reading Disorder, alone or in combination with Mathematics Disorder or Disorder of Written Expression, accounts for approximately four of every five cases of Learning Disorder. The prevalence of Reading Disorder in the United States is estimated at 4% of school-age children. Lower incidence and prevalence figures for Reading Disorder may be found in other countries in which stricter criteria are used.

Course

Although symptoms of reading difficulty (e.g., inability to distinguish among common letters or to associate common phonemes with letter symbols) may occur as early as kindergarten, Reading Disorder is seldom diagnosed before the end of kindergarten or the beginning of first grade because formal reading instruction usually does not begin until this point in most school settings. Particularly when Reading Disorder is associated with high IQ, the child may function at or near grade level in the early grades, and the Reading Disorder may not be fully apparent until the fourth grade or later. With early identification and intervention, the prognosis is good in a significant percentage of cases. Reading Disorder may persist into adult life.

Familial Pattern

Reading Disorder aggregates familially and is more prevalent among first-degree biological relatives of individuals with Learning Disorders.

Differential Diagnosis

See the "Differential Diagnosis" section for Learning Disorders (p. 51).

Diagnostic criteria for 315.00 Reading Disorder

A. Reading achievement, as measured by individually administered standardized tests of reading accuracy or comprehension, is substantially below that expected given the person's chronological age, measured intelligence, and age-appropriate education.

B. The disturbance in Criterion A significantly interferes with academic achievement or activities of daily living that require reading skills.

C. If a sensory deficit is present, the reading difficulties are in excess of those usually associated with it.

Coding note: If a general medical (e.g., neurological) condition or sensory deficit is present, code the condition on Axis III.

315.1 Mathematics Disorder

Diagnostic Features

The essential feature of Mathematics Disorder is mathematical ability (as measured by individually administered standardized tests of mathematical calculation or reasoning) that falls substantially below that expected for the individual's chronological age, measured intelligence, and age-appropriate education (Criterion A). The disturbance in mathematics significantly interferes with academic achievement or with activities of daily living that require mathematical skills (Criterion B). If a sensory deficit is present, the difficulties in mathematical ability are in excess of those usually associated with it (Criterion C). If a neurological or other general medical condition or sensory deficit is present, it should be coded on Axis III. A number of different skills may be impaired in Mathematics Disorder, including "linguistic" skills (e.g., understanding or naming mathematical terms, operations, or concepts, and decoding written problems into mathematical symbols), "perceptual" skills (e.g., recognizing or reading numerical symbols or arithmetic signs, and clustering objects into groups), "attention" skills (e.g., copying numbers or figures correctly, remembering to add in "carried" numbers, and observing operational signs), and "mathematical" skills (e.g., following sequences of mathematical steps, counting objects, and learning multiplication tables).

Associated Features and Disorders

See the "Associated Features and Disorders" section for Learning Disorders (p. 50). Mathematics Disorder is commonly found in combination with Reading Disorder or Disorder of Written Expression.

Prevalence

The prevalence of Mathematics Disorder is difficult to establish because many studies focus on the prevalence of Learning Disorders without careful separation into specific disorders of Reading, Mathematics, or Written Expression. The prevalence of Mathematics Disorder alone (i.e., when not found in association with other Learning Disorders) has been estimated at approximately one in every five cases of Learning Disorder. It is estimated that 1% of school-age children have Mathematics Disorder.

Course

Although symptoms of difficulty in mathematics (e.g., confusion in number concepts or inability to count accurately) may appear as early as kindergarten or first grade, Mathematics Disorder is seldom diagnosed before the end of first grade because sufficient formal mathematics instruction has usually not occurred until this point in most school settings. It usually becomes apparent during second or third grade. Particularly when Mathematics Disorder is associated with high IQ, the child may be able to function at or near grade level in the early grades, and Mathematics Disorder may not be apparent until the fifth grade or later.

Differential Diagnosis

See the "Differential Diagnosis" section for Learning Disorders (p. 51).

Diagnostic criteria for 315.1 Mathematics Disorder

A. Mathematical ability, as measured by individually administered standardized tests, is substantially below that expected given the person's chronological age, measured intelligence, and age-appropriate education.

B. The disturbance in Criterion A significantly interferes with academic achievement or activities of daily living that require mathematical ability.

C. If a sensory deficit is present, the difficulties in mathematical ability are in excess of those usually associated with it.

Coding note: If a general medical (e.g., neurological) condition or sensory deficit is present, code the condition on Axis III.

315.2 Disorder of Written Expression

Diagnostic Features

The essential feature of Disorder of Written Expression is writing skills (as measured by an individually administered standardized test or functional assessment of writing skills) that fall substantially below those expected given the individual's chrono-

logical age, measured intelligence, and age-appropriate education (Criterion A). The disturbance in written expression significantly interferes with academic achievement or with activities of daily living that require writing skills (Criterion B). If a sensory deficit is present, the difficulties in writing skills are in excess of those usually associated with it (Criterion C). If a neurological or other general medical condition or sensory deficit is present, it should be coded on Axis III. There is generally a combination of difficulties in the individual's ability to compose written texts evidenced by grammatical or punctuation errors within sentences, poor paragraph organization, multiple spelling errors, and excessively poor handwriting. This diagnosis is generally not given if there are only spelling errors or poor handwriting in the absence of other impairment in written expression. Compared with other Learning Disorders, relatively less is known about Disorders of Written Expression and their remediation, particularly when they occur in the absence of Reading Disorder. Except for spelling, standardized tests in this area are less well developed than tests of reading or mathematical ability, and the evaluation of impairment in written skills may require a comparison between extensive samples of the individual's written schoolwork and expected performance for age and IQ. This is especially the case for young children in the early elementary grades. Tasks in which the child is asked to copy, write to dictation, and write spontaneously may all be necessary to establish the presence and extent of this disorder.

Associated Features and Disorders

See the "Associated Features and Disorders" section for Learning Disorders (p. 50). Disorder of Written Expression is commonly found in combination with Reading Disorder or Mathematics Disorder. There is some evidence that language and perceptual-motor deficits may accompany this disorder.

Prevalence

The prevalence of Disorder of Written Expression is difficult to establish because many studies focus on the prevalence of Learning Disorders in general without careful separation into specific Disorders of Reading, Mathematics, or Written Expression. Disorder of Written Expression is rare when not associated with other Learning Disorders.

Course

Although difficulty in writing (e.g., particularly poor handwriting or copying ability or inability to remember letter sequences in common words) may appear as early as the first grade, Disorder of Written Expression is seldom diagnosed before the end of first grade because sufficient formal writing instruction has usually not occurred until this point in most school settings. The disorder is usually apparent by second grade. Disorder of Written Expression may occasionally be seen in older children or adults, and little is known about its long-term prognosis.

Differential Diagnosis

See the "Differential Diagnosis" section for Learning Disorders (p. 51). A disorder in spelling or handwriting alone, in the absence of other difficulties of written expression, generally does not qualify for a diagnosis of Disorder of Written Expression. If poor handwriting is due to impairment in motor coordination, a diagnosis of **Developmental Coordination Disorder** should be considered.

Diagnostic criteria for
315.2 Disorder of Written Expression

A. Writing skills, as measured by individually administered standardized tests (or functional assessments of writing skills), are substantially below those expected given the person's chronological age, measured intelligence, and age-appropriate education.

B. The disturbance in Criterion A significantly interferes with academic achievement or activities of daily living that require the composition of written texts (e.g., writing grammatically correct sentences and organized paragraphs).

C. If a sensory deficit is present, the difficulties in writing skills are in excess of those usually associated with it.

Coding note: If a general medical (e.g., neurological) condition or sensory deficit is present, code the condition on Axis III.

315.9 Learning Disorder Not Otherwise Specified

This category is for disorders in learning that do not meet criteria for any specific Learning Disorder. This category might include problems in all three areas (reading, mathematics, written expression) that together significantly interfere with academic achievement even though performance on tests measuring each individual skill is not substantially below that expected given the person's chronological age, measured intelligence, and age-appropriate education.

Motor Skills Disorder

315.4 Developmental Coordination Disorder

Diagnostic Features

The essential feature of Developmental Coordination Disorder is a marked impairment in the development of motor coordination (Criterion A). The diagnosis is made only if this impairment significantly interferes with academic achievement or activi-

ties of daily living (Criterion B). The diagnosis is made if the coordination difficulties are not due to a general medical condition (e.g., cerebral palsy, hemiplegia, or muscular dystrophy) and the criteria are not met for Pervasive Developmental Disorder (Criterion C). If Mental Retardation is present, the motor difficulties are in excess of those usually associated with it (Criterion D). The manifestations of this disorder vary with age and development. For example, younger children may display clumsiness and delays in achieving developmental motor milestones (e.g., walking, crawling, sitting, tying shoelaces, buttoning shirts, zipping pants). Older children may display difficulties with the motor aspects of assembling puzzles, building models, playing ball, and printing or handwriting.

Associated Features and Disorders

Problems commonly associated with Developmental Coordination Disorder include delays in other nonmotor milestones. Associated disorders may include Phonological Disorder, Expressive Language Disorder, and Mixed Receptive-Expressive Language Disorder.

Prevalence

Prevalence of Developmental Coordination Disorder has been estimated to be as high as 6% for children in the age range of 5–11 years.

Course

Recognition of Developmental Coordination Disorder usually occurs when the child first attempts such tasks as running, holding a knife and fork, buttoning clothes, or playing ball games. The course is variable. In some cases, lack of coordination continues through adolescence and adulthood.

Differential Diagnosis

Developmental Coordination Disorder must be distinguished from motor impairments that are due to a general medical condition. Problems in coordination may be associated with **specific neurological disorders** (e.g., cerebral palsy, progressive lesions of the cerebellum), but in these cases there is definite neural damage and abnormal findings on neurological examination. If **Mental Retardation** is present, Developmental Coordination Disorder can be diagnosed only if the motor difficulties are in excess of those usually associated with the Mental Retardation. A diagnosis of Developmental Coordination Disorder is not given if the criteria are met for a **Pervasive Developmental Disorder.** Individuals with **Attention-Deficit/Hyperactivity Disorder** may fall, bump into things, or knock things over, but this is usually due to distractibility and impulsiveness, rather than to a motor impairment. If criteria for both disorders are met, both diagnoses can be given.

Diagnostic criteria for 315.4 Developmental Coordination Disorder

A. Performance in daily activities that require motor coordination is substantially below that expected given the person's chronological age and measured intelligence. This may be manifested by marked delays in achieving motor milestones (e.g., walking, crawling, sitting), dropping things, "clumsiness," poor performance in sports, or poor handwriting.

B. The disturbance in Criterion A significantly interferes with academic achievement or activities of daily living.

C. The disturbance is not due to a general medical condition (e.g., cerebral palsy, hemiplegia, or muscular dystrophy) and does not meet criteria for a Pervasive Developmental Disorder.

D. If Mental Retardation is present, the motor difficulties are in excess of those usually associated with it.

Coding note: If a general medical (e.g., neurological) condition or sensory deficit is present, code the condition on Axis III.

Communication Disorders

The following Communication Disorders are included in this section: Expressive Language Disorder, Mixed Receptive-Expressive Language Disorder, Phonological Disorder, Stuttering, and Communication Disorder Not Otherwise Specified. They are included in this classification to familiarize clinicians with the ways in which Communication Disorders present and to facilitate their differential diagnosis.

315.31 Expressive Language Disorder

Diagnostic Features

The essential feature of Expressive Language Disorder is an impairment in expressive language development as demonstrated by scores on standardized individually administered measures of expressive language development substantially below those obtained from standardized measures of both nonverbal intellectual capacity and receptive language development (Criterion A). When standardized instruments are not available or appropriate, the diagnosis may be based on a thorough functional assessment of the individual's language ability. The difficulties may occur in communication involving both verbal language and sign language. The language difficulties interfere with academic or occupational achievement or with social communication (Criterion B). The symptoms do not meet criteria for Mixed Receptive-Expressive

Language Disorder or a Pervasive Developmental Disorder (Criterion C). If Mental Retardation, a speech-motor or sensory deficit, or environmental deprivation is present, the language difficulties are in excess of those usually associated with these problems (Criterion D). If a speech-motor or sensory deficit or neurological condition is present, it should be coded on Axis III.

The linguistic features of the disorder vary depending on its severity and the age of the child. These features include a limited amount of speech, limited range of vocabulary, difficulty acquiring new words, word-finding or vocabulary errors, shortened sentences, simplified grammatical structures, limited varieties of grammatical structures (e.g., verb forms), limited varieties of sentence types (e.g., imperatives, questions), omissions of critical parts of sentences, use of unusual word order, and slow rate of language development. Nonlinguistic functioning (as measured by performance intelligence tests) and language comprehension skills are usually within normal limits. Expressive Language Disorder may be either acquired or developmental. In the acquired type, an impairment in expressive language occurs after a period of normal development as a result of a neurological or other general medical condition (e.g., encephalitis, head trauma, irradiation). In the developmental type, there is an impairment in expressive language that is not associated with a postnatal neurological insult of known origin. Children with this type often begin speaking late and progress more slowly than usual through the various stages of expressive language development.

Associated Features and Disorders

The most common associated feature of Expressive Language Disorder in younger children is Phonological Disorder. There may also be a disturbance in fluency and language formulation involving an abnormally rapid rate and erratic rhythm of speech and disturbances in language structure ("cluttering"). When Expressive Language Disorder is acquired, additional speech difficulties are also common and may include motor articulation problems, phonological errors, slow speech, syllable repetitions, and monotonous intonation and stress patterns. Among school-age children, school and learning problems (e.g., writing to dictation, copying sentences, and spelling) that sometimes meet criteria for Learning Disorders are often associated with Expressive Language Disorder. There may also be some mild impairment in receptive language skills, but when this is significant, a diagnosis of Mixed Receptive-Expressive Language Disorder should be made. A history of delay in reaching some motor milestones, Developmental Coordination Disorder, and Enuresis are not uncommon. Social withdrawal and some mental disorders such as Attention-Deficit/Hyperactivity Disorder are also commonly associated. Expressive Language Disorder may be accompanied by EEG abnormalities, abnormal findings on neuroimaging, dysarthric or apraxic behaviors, or other neurological signs.

Specific Culture and Gender Features

Assessments of the development of communication abilities must take into account the individual's cultural and language context, particularly for individuals growing up in bilingual environments. The standardized measures of language development

and of nonverbal intellectual capacity must be relevant for the cultural and linguistic group (i.e., tests developed and standardized for one group may not provide appropriate norms for a different group). The developmental type of Expressive Language Disorder is more common in males than in females.

Prevalence

Prevalence estimates vary with age. In children under 3, language delays are quite common, occurring in 10%–15% of children. By school age, prevalence estimates range from 3% to 7%. The developmental type of Expressive Language Disorder is more common than the acquired type.

Course

The developmental type of Expressive Language Disorder is usually recognized by age 3 years, although milder forms of the disorder may not become apparent until early adolescence, when language ordinarily becomes more complex. The acquired type of Expressive Language Disorder due to brain lesions, head trauma, or stroke may occur at any age, and the onset is sudden. The outcome of the developmental type of Expressive Language Disorder is variable. A majority of children with this disorder improve substantially; in a smaller proportion, difficulties persist into adulthood.

Most children ultimately acquire more or less normal language abilities by late adolescence, although subtle deficits may persist. In the acquired type of Expressive Language Disorder, the course and prognosis are related to the severity and location of brain pathology, as well as to the age of the child and the extent of language development at the time the disorder is acquired. Clinical improvement in language abilities is sometimes rapid and complete, although deficits in communication and related cognitive abilities may persist. In other instances there may be progressive deficit.

Familial Pattern

It appears that the developmental type of Expressive Language Disorder is more likely to occur in individuals who have a family history of Communication or Learning Disorders. There is no evidence of familial aggregation in the acquired type.

Differential Diagnosis

Expressive Language Disorder is distinguished from **Mixed Receptive-Expressive Language Disorder** by the presence in the latter of significant impairment in receptive language; many individuals with Expressive Language Disorder have subtle difficulties in receptive skills as well.

Expressive Language Disorder is not diagnosed if the criteria are met for **Autistic Disorder** or another **Pervasive Developmental Disorder.** Autistic Disorder also involves expressive language impairment but may be distinguished from Expressive and Mixed Receptive-Expressive Language Disorders by the characteristics of the communication impairment (e.g., stereotyped use of language) and by the presence

of a qualitative impairment in social interaction and restricted, repetitive, and stereotyped patterns of behavior. Expressive and receptive language development may be impaired due to **Mental Retardation, a hearing impairment** or **other sensory deficit, a speech-motor deficit,** or **severe environmental deprivation.** The presence of these problems may be established by intelligence testing, audiometric testing, neurological testing, and history. If the language difficulties are in excess of those usually associated with these problems, a concurrent diagnosis of Expressive Language or Mixed Receptive-Expressive Language Disorder may be made. Children with expressive language delays due to environmental deprivation may show rapid gains once the environmental problems are ameliorated.

In **Disorder of Written Expression,** there is a disturbance in writing skills. If deficits in oral expression are also present, an additional diagnosis of Expressive Language Disorder may be appropriate. **Selective Mutism** involves limited expressive output that may mimic Expressive or Mixed Receptive-Expressive Language Disorder; careful history and observation are necessary to determine the presence of normal language in some settings. **Acquired aphasia** associated with a general medical condition in childhood is often transient. A diagnosis of Expressive Language Disorder is appropriate only if the language disturbance persists beyond the acute recovery period for the etiological general medical condition (e.g., head trauma, viral infection).

Diagnostic criteria for 315.31 Expressive Language Disorder

A. The scores obtained from standardized individually administered measures of expressive language development are substantially below those obtained from standardized measures of both nonverbal intellectual capacity and receptive language development. The disturbance may be manifest clinically by symptoms that include having a markedly limited vocabulary, making errors in tense, or having difficulty recalling words or producing sentences with developmentally appropriate length or complexity.

B. The difficulties with expressive language interfere with academic or occupational achievement or with social communication.

C. Criteria are not met for Mixed Receptive-Expressive Language Disorder or a Pervasive Developmental Disorder.

D. If Mental Retardation, a speech-motor or sensory deficit, or environmental deprivation is present, the language difficulties are in excess of those usually associated with these problems.

Coding note: If a speech-motor or sensory deficit or a neurological condition is present, code the condition on Axis III.

315.32 Mixed Receptive-Expressive Language Disorder

Diagnostic Features

The essential feature of Mixed Receptive-Expressive Language Disorder is an impairment in both receptive and expressive language development as demonstrated by scores on standardized individually administered measures of both receptive and expressive language development that are substantially below those obtained from standardized measures of nonverbal intellectual capacity (Criterion A). When standardized instruments are not available or appropriate, the diagnosis may be based on a thorough functional assessment of the individual's language ability. The difficulties may occur in communication involving both verbal language and sign language. The language difficulties interfere with academic or occupational achievement or with social communication (Criterion B), and the symptoms do not meet criteria for a Pervasive Developmental Disorder (Criterion C). If Mental Retardation, a speech-motor or sensory deficit, or environmental deprivation is present, the language difficulties are in excess of those usually associated with these problems (Criterion D). If a speech-motor or sensory deficit or a neurological condition is present, it should be coded on Axis III.

An individual with this disorder has the difficulties associated with Expressive Language Disorder (e.g., a markedly limited vocabulary, errors in tense, difficulty recalling words or producing sentences with developmentally appropriate length or complexity, and general difficulty expressing ideas) and also has impairment in receptive language development (e.g., difficulty understanding words, sentences, or specific types of words). In mild cases, there may be difficulties only in understanding particular types of words (e.g., spatial terms) or statements (e.g., complex "if-then" sentences). In more severe cases, there may be multiple disabilities, including an inability to understand basic vocabulary or simple sentences, and deficits in various areas of auditory processing (e.g., discrimination of sounds, association of sounds and symbols, storage, recall, and sequencing). Because the development of expressive language in childhood relies on the acquisition of receptive skills, a pure receptive language disorder (analogous to a Wernicke's aphasia in adults) is virtually never seen (although in some cases the receptive deficit may be more severe than the expressive one).

Mixed Receptive-Expressive Language Disorder may be either acquired or developmental. In the acquired type, an impairment in receptive and expressive language occurs after a period of normal development as a result of a neurological or other general medical condition (e.g., encephalitis, head trauma, irradiation). In the developmental type, there is an impairment in receptive and expressive language that is not associated with a neurological insult of known origin. This type is characterized by a slow rate of language development in which speech may begin late and advance slowly through the stages of language development.

Associated Features and Disorders

The linguistic features of the production impairment in Mixed Receptive-Expressive Language Disorder are similar to those that accompany Expressive Language Disorder. The comprehension deficit is the primary feature that differentiates this disorder from Expressive Language Disorder, and this can vary depending on the severity of the disorder and the age of the child. Impairments in language comprehension can be less obvious than those in language production because they are not as readily apparent to the observer and may appear only on formal assessment. The child may intermittently appear not to hear or to be confused or not paying attention when spoken to. The child may follow commands incorrectly, or not at all, and give tangential or inappropriate responses to questions. The child may be exceptionally quiet or, conversely, very talkative. Conversational skills (e.g., taking turns, maintaining a topic) are often quite poor or inappropriate. Deficits in various areas of sensory information processing are common, especially in temporal auditory processing (e.g., processing rate, association of sounds and symbols, sequence of sounds and memory, attention to and discrimination of sounds); these kinds of difficulties are sometimes referred to as "central auditory processing" disorders.

Difficulty in producing motor sequences smoothly and quickly is also characteristic. Phonological Disorder, Learning Disorders, and deficits in speech perception are often present and accompanied by memory impairments. Other associated disorders are Attention-Deficit/Hyperactivity Disorder, Developmental Coordination Disorder, and Enuresis. Mixed Receptive-Expressive Language Disorder may be accompanied by EEG abnormalities, abnormal findings on neuroimaging, and other neurological signs. A form of acquired Mixed Receptive-Expressive Language Disorder that has its onset at about ages 3–9 years and is accompanied by seizures is referred to as Landau-Kleffner syndrome.

Specific Culture and Gender Features

Assessments of the development of communication abilities must take into account the individual's cultural and language context, particularly for individuals growing up in bilingual environments. The standardized measures of language development and of nonverbal intellectual capacity must be relevant for the cultural and linguistic group. The developmental type is probably more prevalent in males than in females.

Prevalence

Prevalence estimates vary with age. It is estimated that the developmental type of Mixed Receptive-Expressive Language Disorder may occur in up to 5% of preschool children and 3% of school-age children but is probably less common than Expressive Language Disorder. Landau-Kleffner syndrome and other forms of the acquired type of the disorder are relatively uncommon.

Course

The developmental type of Mixed Receptive-Expressive Language Disorder is usually detectable before age 4 years. Severe forms of the disorder may be apparent by age

2 years. Milder forms may not be recognized until the child reaches elementary school, where deficits in comprehension become more apparent. The acquired type of Mixed Receptive-Expressive Language Disorder due to brain lesions, head trauma, or stroke may occur at any age. The acquired type due to Landau-Kleffner syndrome (acquired epileptic aphasia) usually occurs between ages 3 and 9 years. Many children with Mixed Receptive-Expressive Language Disorder eventually acquire normal language abilities, but the prognosis is worse than for those with Expressive Language Disorder. In the acquired type of Mixed Receptive-Expressive Language Disorder, the course and prognosis are related to the severity and location of brain pathology, as well as to the age of the child and the extent of language development at the time the disorder is acquired. Clinical improvement in language abilities is sometimes complete or nearly so. In other instances, there may be incomplete recovery or progressive deficit. Children with more severe forms are likely to develop Learning Disorders.

Familial Pattern

The developmental type of Mixed Receptive-Expressive Language Disorder is more common among first-degree biological relatives of those with the disorder than in the general population. There is no evidence of familial aggregation in the acquired type of the disorder.

Differential Diagnosis

See the "Differential Diagnosis" section for Expressive Language Disorder (p. 60).

Diagnostic criteria for 315.32 Mixed Receptive-Expressive Language Disorder

A. The scores obtained from a battery of standardized individually administered measures of both receptive and expressive language development are substantially below those obtained from standardized measures of nonverbal intellectual capacity. Symptoms include those for Expressive Language Disorder as well as difficulty understanding words, sentences, or specific types of words, such as spatial terms.

B. The difficulties with receptive and expressive language significantly interfere with academic or occupational achievement or with social communication.

C. Criteria are not met for a Pervasive Developmental Disorder.

D. If Mental Retardation, a speech-motor or sensory deficit, or environmental deprivation is present, the language difficulties are in excess of those usually associated with these problems.

Coding note: If a speech-motor or sensory deficit or a neurological condition is present, code the condition on Axis III.

315.39 Phonological Disorder (*formerly* Developmental Articulation Disorder)

Diagnostic Features

The essential feature of Phonological Disorder is a failure to use developmentally expected speech sounds that are appropriate for the individual's age and dialect (Criterion A). This may involve errors in sound production, use, representation, or organization such as, but not limited to, substitutions of one sound for another (use of /t/ for target /k/ sound) or omissions of sounds (e.g., final consonants). The difficulties in speech sound production interfere with academic or occupational achievement or with social communication (Criterion B). If Mental Retardation, a speech-motor or sensory deficit, or environmental deprivation is present, the speech difficulties are in excess of those usually associated with these problems (Criterion C). If a speech-motor or sensory deficit or neurological condition is present, it should be coded on Axis III.

Phonological Disorder includes phonological production (i.e., articulation) errors that involve the failure to form speech sounds correctly and cognitively based forms of phonological problems that involve a deficit in linguistic categorization of speech sounds (e.g., a difficulty in sorting out which sounds in the language make a difference in meaning). Severity ranges from little or no effect on speech intelligibility to completely unintelligible speech. Sound omissions are typically viewed as more severe than are sound substitutions, which in turn are more severe than sound distortions. The most frequently misarticulated sounds are those acquired later in the developmental sequence (*l, r, s, z, th, ch*), but in younger or more severely affected individuals, consonants and vowels that develop earlier may also be affected. Lisping (i.e., misarticulation of sibilants) is particularly common. Phonological Disorder may also involve errors of selection and ordering of sounds within syllables and words (e.g., *aks* for *ask*).

Associated Features and Disorders

Although there may be an association with clear causal factors such as hearing impairment (e.g., due to chronic otitis media) or structural deficits of the oral peripheral speech mechanism (e.g., cleft palate), neurological conditions (e.g., cerebral palsy), cognitive limitations (e.g., Mental Retardation), or psychosocial problems, at least 3% of preschool children present with Phonological Disorders of unknown or suspect origin, which are often referred to as *functional* or *developmental*. There may be a delayed onset of speech. Some forms of Phonological Disorder, involving inconsistent errors, difficulty sequencing sounds in connected speech, and vowel distortions, are sometimes referred to as "developmental dyspraxia of speech."

Specific Culture and Gender Features

Assessments of the development of communication abilities must take into account the individual's cultural and language context, particularly for individuals growing up in bilingual environments. Phonological Disorder is more prevalent in males.

Prevalence

Approximately 2% of 6- and 7-year-olds present with moderate to severe Phonological Disorder, although the prevalence of milder forms of this disorder is higher. The prevalence falls to 0.5% by age 17 years.

Course

In severe Phonological Disorder, the child's speech may be relatively unintelligible even to family members. Less severe forms of the disorder may not be recognized until the child enters a preschool or school environment and has difficulty being understood by those outside the immediate family. The course of the disorder is variable depending on associated causes and severity. In children with mild to moderate phonological problems not due to a general medical condition, about three-fourths show spontaneous normalization by age 6.

Familial Pattern

A familial pattern has been demonstrated for some forms of Phonological Disorder.

Differential Diagnosis

Speech difficulties may be associated with **Mental Retardation, a hearing impairment** or **other sensory deficit,** a **speech-motor deficit,** or **severe environmental deprivation.** The presence of these problems may be established by intelligence testing, audiometric testing, neurological testing, and history. If the speech difficulties are in excess of those usually associated with these problems or if they interfere with the child's ability to be understood by significant others, a concurrent diagnosis of Phonological Disorder may be made. Problems limited to **speech rhythm** or **voice** are not included as part of Phonological Disorder and instead are diagnosed as **Stuttering** or **Communication Disorder Not Otherwise Specified.** Children with speech difficulties due to environmental deprivation may show rapid gains once the environmental problems are ameliorated.

Diagnostic criteria for 315.39 Phonological Disorder

A. Failure to use developmentally expected speech sounds that are appropriate for age and dialect (e.g., errors in sound production, use, representation, or organization such as, but not limited to, substitutions of one sound for another [use of /t/ for target /k/ sound] or omissions of sounds such as final consonants).

B. The difficulties in speech sound production interfere with academic or occupational achievement or with social communication.

C. If Mental Retardation, a speech-motor or sensory deficit, or environmental deprivation is present, the speech difficulties are in excess of those usually associated with these problems.

Coding note: If a speech-motor or sensory deficit or a neurological condition is present, code the condition on Axis III.

307.0 Stuttering

Diagnostic Features

The essential feature of Stuttering is a disturbance in the normal fluency and time patterning of speech that is inappropriate for the individual's age (Criterion A). This disturbance is characterized by frequent repetitions or prolongations of sounds or syllables (Criteria A1 and A2). Various other types of speech dysfluencies may also be involved, including interjections (Criterion A3), broken words (e.g., pauses within a word) (Criterion A4), audible or silent blocking (filled or unfilled pauses in speech) (Criterion A5), circumlocutions (i.e., word substitutions to avoid problematic words) (Criterion A6), words produced with an excess of physical tension (Criterion A7), and monosyllabic whole-word repetitions (e.g., "I-I-I-I see him") (Criterion A8). The disturbance in fluency interferes with academic or occupational achievement or with social communication (Criterion B). If a speech-motor or sensory deficit is present, the speech difficulties are in excess of those usually associated with these problems (Criterion C). If a speech-motor or sensory deficit or a neurological disorder is present, this condition should also be coded on Axis III. The extent of the disturbance varies from situation to situation and often is more severe when there is special pressure to communicate (e.g., giving a report at school, interviewing for a job). Stuttering is often absent during oral reading, singing, or talking to inanimate objects or to pets.

Associated Features and Disorders

At the onset of Stuttering, the speaker may not be aware of the problem, although awareness and even fearful anticipation of the problem may develop later. The speaker may attempt to avoid stuttering by linguistic mechanisms (e.g., altering the rate of speech, avoiding certain speech situations such as telephoning or public speaking, or avoiding certain words or sounds). Stuttering may be accompanied by motor movements (e.g., eye blinks, tics, tremors of the lips or face, jerking of the head, breathing movements, or fist clenching). Stress or anxiety have been shown to exacerbate Stuttering. Impairment of social functioning may result from associated anxiety, frustration, or low self-esteem. In adults, Stuttering may limit occupational choice or advancement. Phonological Disorder and Expressive Language Disorder occur at a higher frequency in individuals with Stuttering than in the general population.

Prevalence

The prevalence of Stuttering in prepubertal children is 1% and drops to 0.8% in adolescence. The male-to-female ratio is approximately 3:1.

Course

Retrospective studies of individuals with Stuttering report onset typically between ages 2 and 7 years (with peak onset at around age 5 years). Onset occurs before age 10 years in 98% of cases. The onset is usually insidious, covering many months during

which episodic, unnoticed speech dysfluencies become a chronic problem. Typically, the disturbance starts gradually, with repetition of initial consonants, words that are usually the first words of a phrase, or long words. The child is generally not aware of Stuttering. As the disorder progresses, there is a waxing and waning course. The dysfluencies become more frequent, and the Stuttering occurs on the most meaningful words or phrases in the utterance. As the child becomes aware of the speech difficulty, mechanisms for avoiding the dysfluencies and emotional responses may occur. Research suggests that some proportion recover; estimates range from 20% to 80%. Some individuals with Stuttering recover spontaneously, typically before age 16 years.

Familial Pattern

Family and twin studies provide strong evidence of a genetic factor in the etiology of Stuttering. The presence of a Phonological Disorder or the developmental type of Expressive Language Disorder, or a family history of these, increases the likelihood of Stuttering. The risk of Stuttering among first-degree biological relatives is more than three times the risk in the general population. For men with a history of Stuttering, about 10% of their daughters and 20% of their sons will stutter.

Differential Diagnosis

Speech difficulties may be associated with a **hearing impairment** or **other sensory deficit** or a **speech-motor deficit.** In instances where the speech difficulties are in excess of those usually associated with these problems, a concurrent diagnosis of Stuttering may be made. Stuttering must be distinguished from **normal dysfluencies that occur frequently in young children,** which include whole-word or phrase repetitions (e.g., "I want, I want ice cream"), incomplete phrases, interjections, unfilled pauses, and parenthetical remarks. If these difficulties increase in frequency or complexity as the child grows older, a diagnosis of Stuttering becomes more likely.

Diagnostic criteria for 307.0 Stuttering

A. Disturbance in the normal fluency and time patterning of speech (inappropriate for the individual's age), characterized by frequent occurrences of one or more of the following:

(1) sound and syllable repetitions
(2) sound prolongations
(3) interjections
(4) broken words (e.g., pauses within a word)
(5) audible or silent blocking (filled or unfilled pauses in speech)
(6) circumlocutions (word substitutions to avoid problematic words)
(7) words produced with an excess of physical tension
(8) monosyllabic whole-word repetitions (e.g., "I-I-I-I see him")

B. The disturbance in fluency interferes with academic or occupational achievement or with social communication.

C. If a speech-motor or sensory deficit is present, the speech difficulties are in excess of those usually associated with these problems.

Coding note: If a speech-motor or sensory deficit or a neurological condition is present, code the condition on Axis III.

307.9 Communication Disorder Not Otherwise Specified

This category is for disorders in communication that do not meet criteria for any specific Communication Disorder; for example, a voice disorder (i.e., an abnormality of vocal pitch, loudness, quality, tone, or resonance).

Pervasive Developmental Disorders

Pervasive Developmental Disorders are characterized by severe and pervasive impairment in several areas of development: reciprocal social interaction skills, communication skills, or the presence of stereotyped behavior, interests, and activities. The qualitative impairments that define these conditions are distinctly deviant relative to the individual's developmental level or mental age. This section contains Autistic Disorder, Rett's Disorder, Childhood Disintegrative Disorder, Asperger's Disorder, and Pervasive Developmental Disorder Not Otherwise Specified. These disorders are usually evident in the first years of life and are often associated with some degree of Mental Retardation, which, if present, should be coded on Axis II. The Pervasive Developmental Disorders are sometimes observed with a diverse group of other general medical conditions (e.g., chromosomal abnormalities, congenital infections, structur-

al abnormalities of the central nervous system). If such conditions are present, they should be noted on Axis III. Although terms like "psychosis" and "childhood schizophrenia" were once used to refer to individuals with these conditions, there is considerable evidence to suggest that the Pervasive Developmental Disorders are distinct from Schizophrenia (however, an individual with Pervasive Developmental Disorder may occasionally later develop Schizophrenia).

299.00 Autistic Disorder

Diagnostic Features

The essential features of Autistic Disorder are the presence of markedly abnormal or impaired development in social interaction and communication and a markedly restricted repertoire of activity and interests. Manifestations of the disorder vary greatly depending on the developmental level and chronological age of the individual. Autistic Disorder is sometimes referred to as *early infantile autism, childhood autism,* or *Kanner's autism.*

The impairment in reciprocal social interaction is gross and sustained. There may be marked impairment in the use of multiple nonverbal behaviors (e.g., eye-to-eye gaze, facial expression, body postures and gestures) to regulate social interaction and communication (Criterion A1a). There may be failure to develop peer relationships appropriate to developmental level (Criterion A1b) that may take different forms at different ages. Younger individuals may have little or no interest in establishing friendships. Older individuals may have an interest in friendship but lack understanding of the conventions of social interaction. There may be a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., not showing, bringing, or pointing out objects they find interesting) (Criterion A1c). Lack of social or emotional reciprocity may be present (e.g., not actively participating in simple social play or games, preferring solitary activities, or involving others in activities only as tools or "mechanical" aids) (Criterion A1d). Often an individual's awareness of others is markedly impaired. Individuals with this disorder may be oblivious to other children (including siblings), may have no concept of the needs of others, or may not notice another person's distress.

The impairment in communication is also marked and sustained and affects both verbal and nonverbal skills. There may be delay in, or total lack of, the development of spoken language (Criterion A2a). In individuals who do speak, there may be marked impairment in the ability to initiate or sustain a conversation with others (Criterion A2b), or a stereotyped and repetitive use of language or idiosyncratic language (Criterion A2c). There may also be a lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level (Criterion A2d). When speech does develop, the pitch, intonation, rate, rhythm, or stress may be abnormal (e.g., tone of voice may be monotonous or inappropriate to context or may contain questionlike rises at ends of statements). Grammatical structures are often immature and include stereotyped and repetitive use of language (e.g., repetition of words or phrases regardless of meaning; repeating jingles or commercials) or idiosyncratic language (i.e., language that has meaning only to those familiar with the individual's communication style). Language comprehension is often very delayed,

and the individual may be unable to understand simple questions or directions. A disturbance in the pragmatic (social use) of language is often evidenced by an inability to integrate words with gestures or understand humor or nonliteral aspects of speech such as irony or implied meaning. Imaginative play is often absent or markedly impaired. These individuals also tend not to engage in the simple imitation games or routines of infancy or early childhood or do so only out of context or in a mechanical way.

Individuals with Autistic Disorder have restricted, repetitive, and stereotyped patterns of behavior, interests, and activities. There may be an encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus (Criterion A3a); an apparently inflexible adherence to specific, nonfunctional routines or rituals (Criterion A3b); stereotyped and repetitive motor mannerisms (Criterion A3c); or a persistent preoccupation with parts of objects (Criterion A3d). Individuals with Autistic Disorder display a markedly restricted range of interests and are often preoccupied with one narrow interest (e.g., dates, phone numbers, radio station call letters). They may line up an exact number of play things in the same manner over and over again or repetitively mimic the actions of a television actor. They may insist on sameness and show resistance to or distress over trivial changes (e.g., a younger child may have a catastrophic reaction to a minor change in the environment such as rearrangement of the furniture or use of a new set of utensils at the dinner table). There is often an interest in nonfunctional routines or rituals or an unreasonable insistence on following routines (e.g., taking exactly the same route to school every day). Stereotyped body movements include the hands (clapping, finger flicking) or whole body (rocking, dipping, and swaying). Abnormalities of posture (e.g., walking on tiptoe, odd hand movements and body postures) may be present. These individuals show a persistent preoccupation with parts of objects (buttons, parts of the body). There may also be a fascination with movement (e.g., the spinning wheels of toys, the opening and closing of doors, an electric fan or other rapidly revolving object). The person may be highly attached to some inanimate object (e.g., a piece of string or a rubber band).

The disturbance must be manifest by delays or abnormal functioning in at least one (and often several) of the following areas prior to age 3 years: social interaction, language as used in social communication, or symbolic or imaginative play (Criterion B). In most cases, there is no period of unequivocally normal development, although in perhaps 20% of cases parents report relatively normal development for 1 or 2 years. In such cases, parents may report that the child acquired a few words and lost these or seemed to stagnate developmentally.

By definition, if there is a period of normal development, it cannot extend past age 3 years. The disturbance must not be better accounted for by Rett's Disorder or Childhood Disintegrative Disorder (Criterion C).

Associated Features and Disorders

Associated descriptive features and mental disorders. In most cases, there is an associated diagnosis of Mental Retardation, which can range from mild to profound. There may be abnormalities in the development of cognitive skills. The profile of cog-

nitive skills is usually uneven, regardless of the general level of intelligence, with verbal skills typically weaker than nonverbal skills. Sometimes special skills are present (e.g., a 4½-year-old girl with Autistic Disorder may be able to "decode" written materials with minimal understanding of the meaning of what is read [hyperlexia] or a 10-year-old boy may have prodigious abilities to calculate dates [calendar calculation]). Estimates of single-word (receptive or expressive) vocabulary are not always good estimates of language level (i.e., actual language skills may be at much lower levels).

Individuals with Autistic Disorder may have a range of behavioral symptoms, including hyperactivity, short attention span, impulsivity, aggressiveness, self-injurious behaviors, and, particularly in young children, temper tantrums. There may be odd responses to sensory stimuli (e.g., a high threshold for pain, oversensitivity to sounds or being touched, exaggerated reactions to light or odors, fascination with certain stimuli). There may be abnormalities in eating (e.g., limiting diet to a few foods, Pica) or sleeping (e.g., recurrent awakening at night with rocking). Abnormalities of mood or affect (e.g., giggling or weeping for no apparent reason, an apparent absence of emotional reaction) may be present. There may be a lack of fear in response to real dangers, and excessive fearfulness in response to harmless objects. A variety of self-injurious behaviors may be present (e.g., head banging or finger, hand, or wrist biting). In adolescence or early adult life, individuals with Autistic Disorder who have the intellectual capacity for insight may become depressed in response to the realization of their serious impairment.

Associated laboratory findings. When Autistic Disorder is associated with a general medical condition, laboratory findings consistent with the general medical condition will be observed. There are group differences in some measures of serotonergic activity, but these are not diagnostic for Autistic Disorder. Imaging studies may be abnormal in some cases, but no specific pattern has been clearly identified. EEG abnormalities are common even in the absence of seizure disorders.

Associated physical examination findings and general medical conditions. Various nonspecific neurological symptoms or signs may be noted (e.g., primitive reflexes, delayed development of hand dominance) in Autistic Disorder. The condition is sometimes observed in association with a neurological or other general medical condition (e.g., fragile X syndrome and tuberous sclerosis).

Seizures may develop (particularly in adolescence) in as many as 25% of cases. Both microcephaly and macrocephaly are observed. When other general medical conditions are present, they should be noted on Axis III.

Specific Age and Gender Features

The nature of the impairment in social interaction may change over time in Autistic Disorder and may vary depending on the developmental level of the individual. In infants, there may be a failure to cuddle; an indifference or aversion to affection or physical contact; a lack of eye contact, facial responsiveness, or socially directed smiles; and a failure to respond to their parents' voices. As a result, parents may be concerned initially that the child is deaf. Young children with this disorder may treat